Customer's Record

The model number and serial number of this product may be found on its rear panel. You should note the model number and the serial number in the space provided below and retain this book, plus your purchase receipt, as a permanent record of your purchase to aid in identification in the event of theft or loss, and for Warranty Service purposes.

Model Number **Serial Number**

Panasonic Corporation

Web Site : http://panasonic.net

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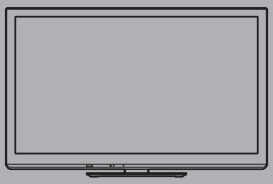
M0311-1041
Printed in Thailand

Panasonic

Model No.
TH-P42ST30A
TH-P50ST30A

Operating Instructions
Plasma Television



VIERA

Thank you for purchasing this Panasonic product.
Please read these instructions before operating your set and retain them for future reference.
The images shown in this manual are for illustrative purposes only.

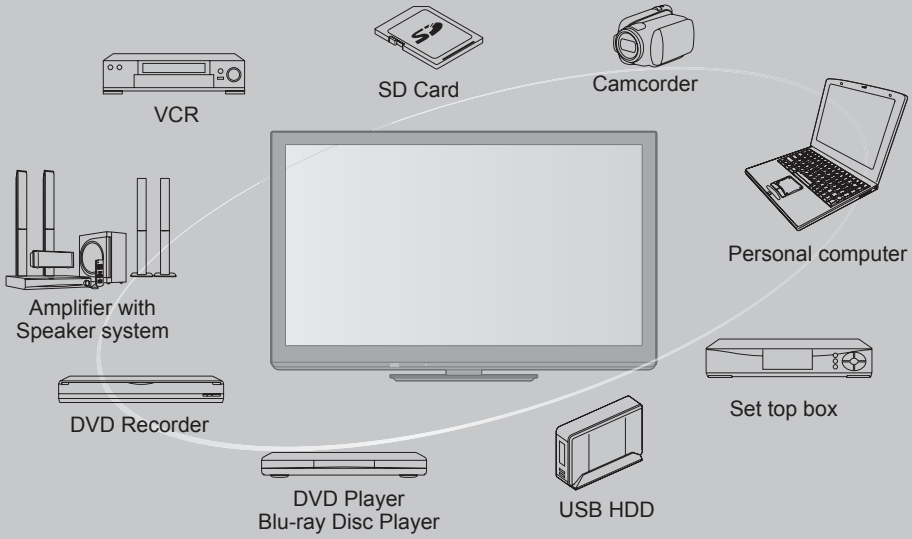
English

TQB4TC0056-1

Enjoy viewing 3D images and experience an amazing level of multimedia excitement

Receive digital terrestrial services using an integrated Digital TV tuner
Sharp pictures with HDMI terminal
Create home theatre and DVD recorder link-ups with “VIERA Link” without complicated settings!

Enjoy rich multimedia



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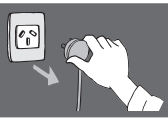
Safety Precautions

Warning

Handling the mains plug and lead

- Insert the mains plug fully into the socket outlet. (If the mains plug is loose, it could generate heat and cause fire.)
- Ensure that the mains plug is easily accessible.
- Ensure the earth pin on the mains plug is securely connected to prevent electrical shock.
  - An apparatus with CLASS I construction shall be connected to a mains socket outlet with a protective earthing connection.
- Do not touch the mains plug with a wet hand. (This may cause electrical shock.)
- Do not damage the mains lead. (A damaged lead may cause fire or electrical shock.)
  - Do not move the TV with the lead plugged in the socket outlet.
  - Do not place a heavy object on the lead or place the lead near a high-temperature object.
  - Do not twist the lead, bend it excessively, or stretch it.
  - Do not pull on the lead. Hold onto the mains plug body when disconnecting the lead.
  - Do not use a damaged mains plug or socket outlet.

If you find any abnormality, remove the mains plug immediately!



AC 220 - 240 V, 50 / 60 Hz

Power source / Installation

- This TV is designed for:
  - AC 220 - 240 V, 50 / 60 Hz
  - Indoor use

Do not insert foreign objects into the TV

- Do not allow any objects to drop into the TV through the air vents. (Fire or electrical shock may result.)

Do not remove covers and NEVER modify the TV yourself

- Do not remove the rear cover as live parts are accessible when it is removed. There are no user serviceable parts inside. (High-voltage components may cause serious electrical shock.)
- Have the TV checked, adjusted, or repaired at your local Panasonic dealer.

Do not place the TV on sloped or unstable surfaces

- The TV may fall off or tip over.

Do not expose to rain or excessive moisture

- To prevent damage which might result in electric shock or fire, do not expose this TV to rain or excessive moisture. This TV must not be exposed to dripping or splashing water and objects filled with liquid, such as vases, must not be placed on top of or above the TV.

Use only the dedicated pedestals / mounting equipment

- Using an unapproved pedestal or other fixtures may make the TV unstable, risking injury. Be sure to ask your local Panasonic dealer to perform setup.
- Use approved pedestals (p. 6) / wall-hanging brackets (p. 9).

Do not expose to direct sunlight and other sources of heat

- Avoid exposing the TV to direct sunlight and other sources of heat.

To prevent the spread of fire, keep candles or other open flames away from this product at all times

Do not allow children to handle SD Card

- As with any small object, SD Cards can be swallowed by young children. Please remove SD Card immediately after use and store out of reach of children.

Important Installation Notices

Install the TV on a stable surface

If a television is not positioned in a sufficiently stable location, it can be potentially hazardous due to falling. Many injuries, particularly to children, can be avoided by taking simple precautions such as:

- Using cabinets or stands recommended by the manufacturer of the television.
- Only using furniture that can safely support the television.
- Ensuring the television is not overhanging the edge of the supporting furniture.
- Not placing the television on tall furniture (for example, cupboards or bookcases) without anchoring both the furniture and the television to a suitable support.
- Not standing the television on cloth or other materials placed between the television and supporting furniture.
- Educating children about the dangers of climbing on furniture to reach the television or its controls.

When cleaning the TV, remove the mains plug

- Cleaning an energised TV may cause electrical shock.

When the TV is not going to be used for a long period of time, remove the mains plug

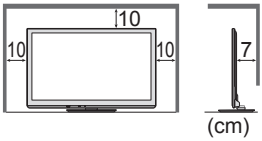
- This TV will still consume some power even in the Off mode, as long as the mains plug is still connected to a live socket outlet.

Transport only in upright position

- Transporting the TV with its display panel facing upward or downward may cause damage to the internal circuitry.

Allow sufficient space around the TV for radiated heat

Minimum distance



- When using the pedestal, keep the space between the bottom of the TV and the surface where the TV is set.
- If using a Wall-hanging bracket, refer to its manual.

Do not block the rear air vents

- Blocked ventilation by newspapers, table cloths, curtains, etc. may cause overheating, fire or electrical shock.

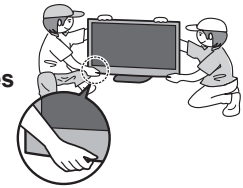
Do not apply strong force or impact to the display panel

- This may cause damage resulting in injury.

Do not expose your ears to excessive volume from the headphones

- Irreversible damage can be caused.

The TV is heavy. Handle the TV by 2 or more people. Support as shown to avoid injury by the TV tipping or falling.



Notes

Do not display a still picture for a long time

This causes the image to remain on the plasma screen (“image retention”). This is not considered a malfunction and is not covered by the warranty.

Typical still images

- Programme number and other logos
- Image displayed in 4:3 mode

- Video game
- Computer image

To prevent image retention, contrast is lowered automatically after a few minutes if no signals are sent or no operations are performed. (p. 95)

Auto power standby function

- The TV will automatically go into Standby mode in the following conditions:
  - no signal is received and no operation is performed for 30 minutes in Analogue TV mode
  - [Off Timer] is active in the Timer Menu (p. 20)
  - no operation is performed for the period selected in [Auto Standby] (p. 37)
- This function does not affect the recording of Timer Programming and One Touch Recording.

Keep the TV away from these types of equipment

- Electronic equipment
  In particular, do not place video equipment near the TV. Electromagnetic interference may distort images / sound.
- Equipment with an infrared sensor
  This TV also emits infrared rays. This may affect operation of other equipment.

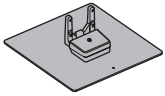
Accessories / Options

Standard accessories

Remote Control
- N2QAYB000583

Batteries for the Remote Control (2)
- R6 (AA)

Pedestal
➡ (p. 7)



Ferrite core (2) (Large size)
- J0KG00000014

➡ (p. 86)

Ferrite core (Small size)
- J0KG00000011

➡ (p. 86)

(TH-P42ST30A only)

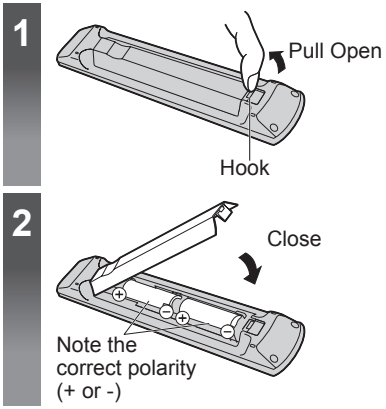
Use the Ferrite cores to comply with the EMC standard.

Fall-prevention parts
➡ (p. 8)

Operating Instructions with Warranty statement

- This product contains possibly dangerous parts (such as plastic bags), which can be breathed in or swallowed by young children accidentally. Keep these parts out of reach of young children.

Inserting and removing remote's batteries



Caution
- Incorrect installation may cause battery leakage and corrosion, resulting in damage to the remote control.
- Do not mix old and new batteries.
- Do not mix different battery types (such as alkaline and manganese batteries).
- Do not use rechargeable (Ni-Cd) batteries.
- Do not burn or breakup batteries. Batteries must not be exposed to excessive heat such as sunshine, fire or the like.
- Do not disassemble or modify the remote control.

Attaching the pedestal

Warning

Do not disassemble or modify the pedestal.
- Otherwise the TV may fall over and become damaged, and personal injury may result.

Caution

Do not use any pedestal other than that provided with this TV.
- Otherwise the TV or the display may fall over and become damaged, and personal injury may result.

Do not use the pedestal if it becomes warped or physically damaged.
- If you use the pedestal while it is physically damaged, personal injury may result. Contact your nearest Panasonic dealer immediately.

During set-up, make sure that all screws are securely tightened.
- If insufficient care is taken to ensure screws are properly tightened during assembly, the pedestal will not be strong enough to support the TV, and it might fall over and become damaged, and personal injury may result.

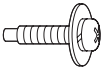
Ensure that the TV does not fall over.
- If the TV is knocked or children climb onto the pedestal with the TV installed, the TV may fall over and personal injury may result.

Two or more people are required to install and remove the TV.
- If two or more people are not present, the TV may be dropped, and personal injury may result.

When removing the pedestal from the TV, do not remove the pedestal by the methods other than the specified procedure. (p. 7)
- Otherwise the TV and / or pedestal may fall over and become damaged, and personal injury may result.

Ⓐ **Assembly screw (4) (silver)**
- M5 × 20 (mm)

Ⓑ **Assembly screw (4) (black)**
- M5 × 25 (mm)

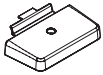


Ⓒ **Assembly screw (1) (black)**
- M4 × 8 (mm)

Ⓓ **Pole**
- TBL5ZA3051

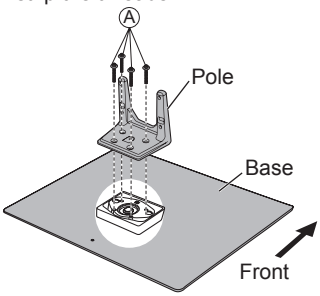
Ⓔ **Base**
- TBL5ZX0043 (TH-P42ST30A)
- TBL5ZX0072 (TH-P50ST30A)

Ⓕ **Cover (1)**
- TBL5ZB3039

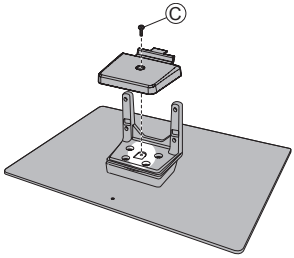


Assembling the pedestal

Use the assembly screws Ⓐ to fasten the pole Ⓓ to the base Ⓔ securely.
- Make sure that the screws are securely tightened.
- Forcing the assembly screws the wrong way will strip the threads.



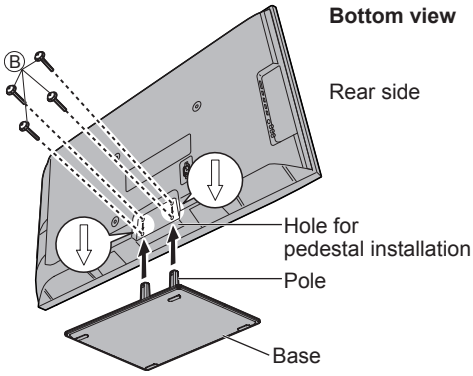
- Attach the cover Ⓕ with assembly screw Ⓒ



Securing the TV

Insert the pole into the TV, and then fasten securely with the assembly screws Ⓑ.
- Tighten the four assembly screws loosely at first, then tighten them firmly to fix securely.
- Carry out the work on a horizontal and level surface.

Bottom view

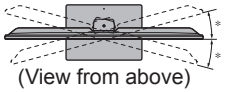


Removing the pedestal from the TV

Be sure to remove the pedestal in the following way when using the wall-hanging bracket or repacking the TV.

1 Remove the assembly screws Ⓑ from the TV.
2 Pull out the pedestal from the TV.
3 Remove the assembly screw Ⓒ from the cover.
4 Pull out the cover.
5 Remove the assembly screws Ⓐ from the pole.

Adjust the panel to your desired angle



(View from above)

∗15°
(TH-P42ST30A)

∗10°
(TH-P50ST30A)

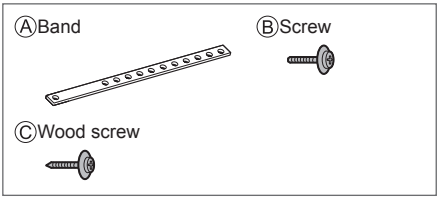
- Ensure that the pedestal does not hang over the edge of the base even if the TV swivels to the full rotation range.
- Do not place any objects or hands within the full rotation range.

Preventing the TV from falling over

This TV could fall over if it is pushed, pulled or knocked down.
We therefore recommend the TV is secured to the furniture as illustrated.

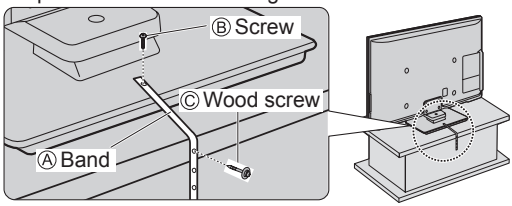
- This measure is designed to reduce the risk of injury from a falling TV. However, it cannot guarantee protection in all cases.

Fall-prevention parts



Securing to a furniture

Fix pedestal and furniture together with band.

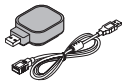


- This image is for illustrative purposes only.

Optional accessories

Please contact your nearest Panasonic dealer to purchase the recommended optional accessories. For additional details, please refer to the manual of the optional accessories.

Wireless LAN Adaptor
- DY-WL10E-K



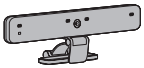
Caution
- To use the Wireless LAN Adaptor, your network needs to have a Wireless Access Point.
- It is recommended to use the Wireless LAN Adaptor with the extension cable.
- To avoid radio wave interference, keep the TV away from the devices such as other wireless LAN devices, microwaves and the devices that use 2.4 GHz and 5 GHz signals when using the Wireless LAN Adaptor. Otherwise malfunction may occur.
- This optional accessory may not be available in your market region.
- Additional information for Wireless LAN Adaptor and Wireless Access Point may be found at the following web site. (English only) http://panasonic.jp/support/global/cs/tv/

3D Eyewear
(Battery type)
- TY-EW3D10W

(Rechargeable type)
- TY-EW3D2SW
- TY-EW3D2MW
- TY-EW3D2LW

- Product information (Model No. and release date etc.) is subject to change without notice.
- For more product information (English only) http://panasonic.net/avc/viera/3d/asia.html

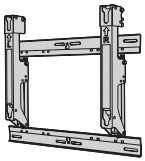
Communication Camera
- TY-CC10W



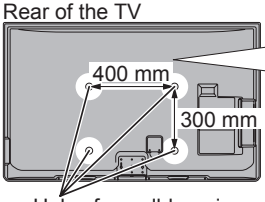
Caution
- This camera can be used on VIERA Connect (p. 17).
- Please also read the manual of the camera.
- Depending on the area, this optional accessory may not be available. For details, consult your local Panasonic dealer.

Wall-hanging bracket
- TY-WK4P1RW

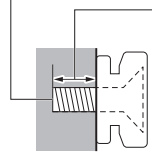
The angle of wall-hanging bracket can be adjusted in “zero tilting (vertical)” and “5, 10 or 15-degree tilting” for this TV.



Rear of the TV



Screw for fixing the TV onto the wall-hanging bracket (not supplied with the TV)



Depth of screw:
minimum 17 mm
maximum 22 mm

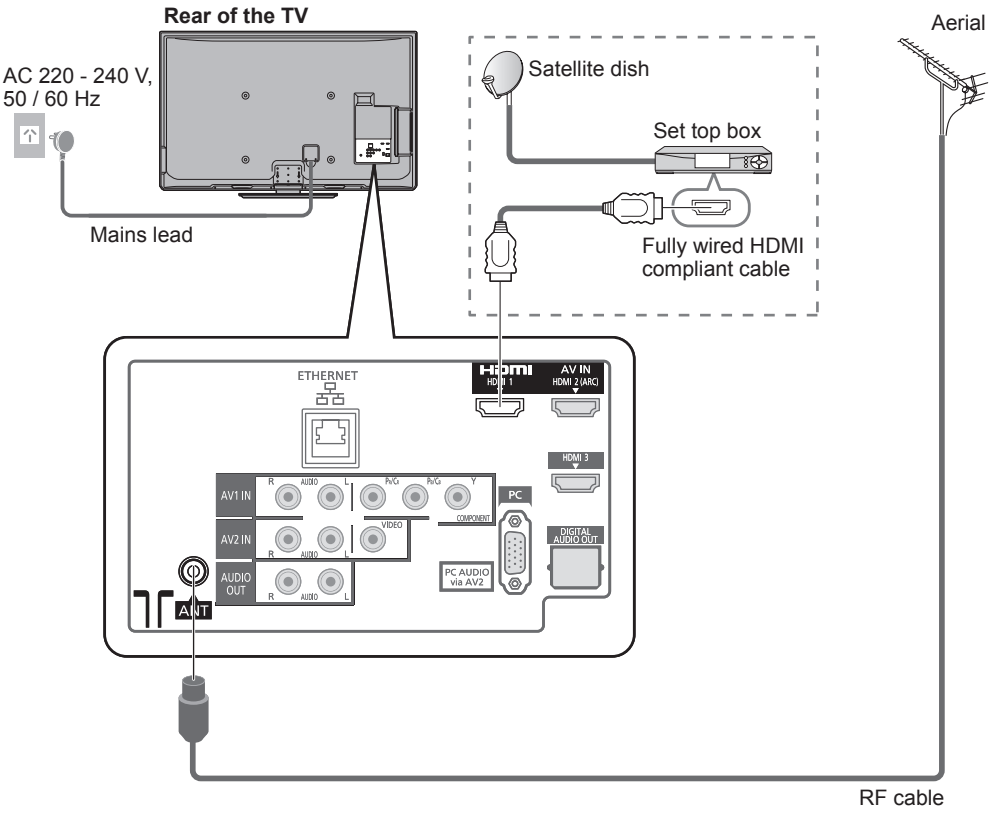
Screw Thread Type: M8

(View from the side)

Warning
- Using other wall-hanging brackets, or installing a wall-hanging bracket by yourself have the risk of personal injury and product damage. In order to maintain the unit’s performance and safety, be absolutely sure to ask your dealer or a licensed contractor to secure the wall-hanging brackets. Any damage caused by installing without a qualified installer will void your warranty.
- Carefully read the instructions accompanying optional accessories, and be absolutely sure to take steps to prevent the TV from falling off.
- Handle the TV carefully during installation since subjecting it to impact or other forces may cause product damage.
- Take care when fixing wall brackets to the wall. Always ensure that there are no electrical cables or pipes in the wall before hanging bracket.
- To prevent fall and injury, remove the TV from its fixed wall position when it is no longer in use.

Basic Connection

External equipment and cables shown are not supplied with this TV.
Please ensure that the unit is disconnected from the mains socket before attaching or disconnecting any leads.

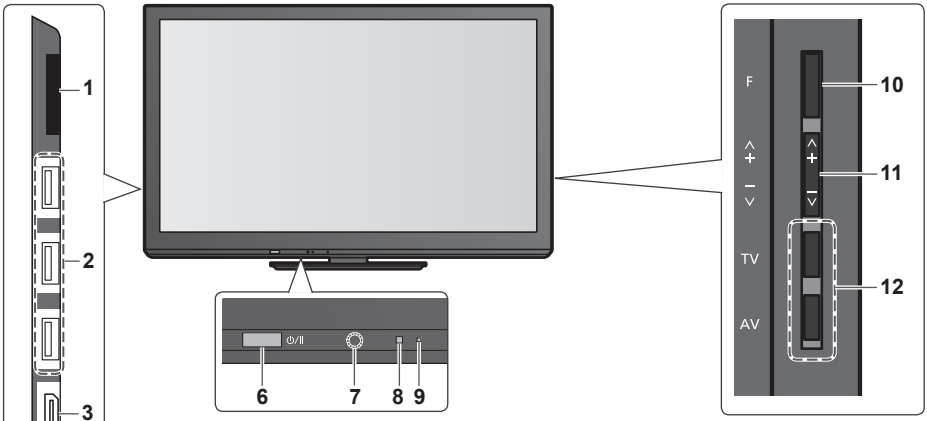


Note

- Keep RF (antenna) cable away from the mains lead to avoid and minimise mains interference pickup.
- Do not place the RF cable under the TV.
- To obtain optimum quality picture and sound, an aerial, the correct cable (75 Ω coaxial), and the correct terminating plug are required.
- If a communal aerial system is used, you may require the correct connection cable and plug between the wall aerial socket and the TV.
- Your local Television Service Centre or dealer may be able to assist you in obtaining the correct aerial system for your particular area and the accessories required.
- Any matters regarding aerial installation, upgrading of existing systems or accessories required, and the costs incurred, are the responsibility of you, the Customer.
- VIERA Link connection ➡ **(p. 79)**
- Other equipment connection ➡ **(p. 84 - 86, 96)**
- Read the manual of the external equipment, too.

Identifying Controls

TV



1 SD Card slot

2 USB1 - 3 port

3 HDMI4 terminal

4 Headphones jack

5 AV3 terminals

6 Mains power On / Off switch

- Use to switch the mains power. If you turned the TV Off during Standby mode by the remote control last time, the TV will be in Standby mode when you turn the TV On with Mains power On / Off switch.

7 Remote control signal receiver

- Do not place any objects between the TV remote control signal receiver and remote control.

8 C.A.T.S. (Contrast Automatic Tracking System) sensor

- Senses brightness to adjust picture quality when [Eco Mode] in the Picture Menu is set to [On] ➡ **(p. 33)**

9 Power LED

- Red: Standby
  Green: On
  Orange (flash): [USB Charge in Standby] is [On]
- When using the remote control, indicates the TV has received a command.

10 Function select

- [Volume] / [Contrast] / [Brightness] / [Colour] / [Sharpness] / [Tint] (NTSC signal) / [Bass] ([Music] or [Speech] mode in the Sound Menu) / [Treble] ([Music] or [Speech] mode in the Sound Menu) / [Balance] / [Digital TV Auto Tuning] or [Analogue TV Auto Tuning]

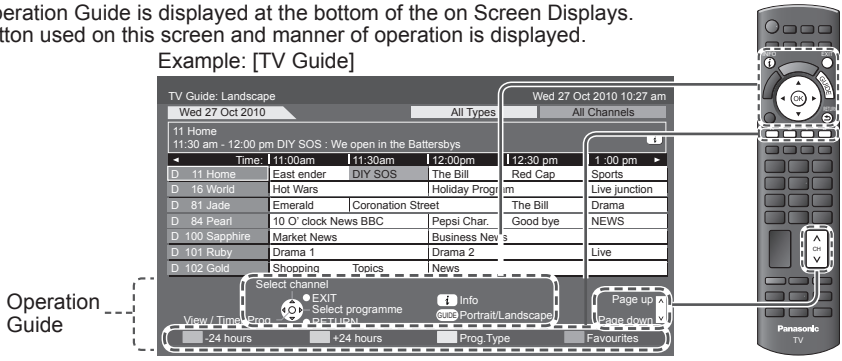
11 Channel Up / Down, Value change (when using the F button), Switching the TV On (press either button for about 1 second when in Standby mode)

12 Changes the input mode

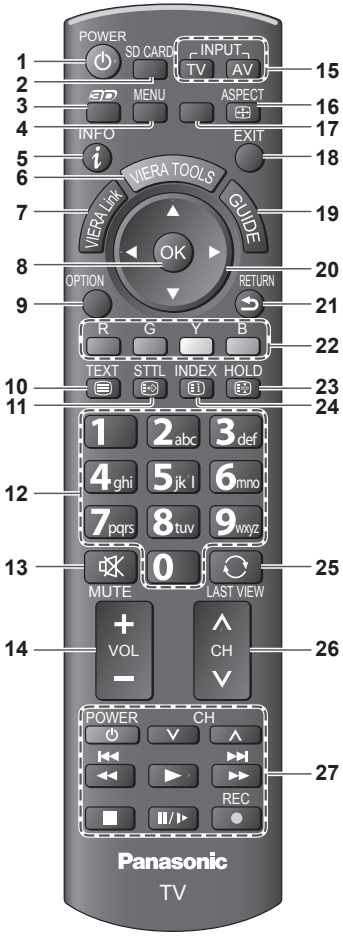
About the Operation Guide - On Screen Displays

The Operation Guide is displayed at the bottom of the on Screen Displays.
The button used on this screen and manner of operation is displayed.

Example: [TV Guide]



Remote Control



1 Standby On / Off switch
- Switches TV On or Off standby

2 [Media Player] ➡ **(p. 57)**
- Switches to SD Card and USB device viewing / listening mode

3 [3D Settings] ➡ **(p. 30)**

4 [Main Menu] ➡ **(p. 32)**
- Press to access Picture, Sound and Setup Menus

5 Information ➡ **(p. 19)**
- Displays channel and programme information

6 VIERA TOOLS ➡ **(p. 31)**
- Displays some special feature icons and accesses easily

7 [VIERA Link Menu] ➡ **(p. 81)**
- Accesses VIERA Link Menu

8 OK
- Confirms selections and choices
- Press after selecting channel positions to quickly change programme

9 [Option Menu] ➡ **(p. 20)**
- Easy optional setting for viewing, sound, etc.

10 Teletext
- This button is not used for this model.

11 Subtitles ➡ **(p. 18)**
- Displays subtitles

12 Numeric buttons
- Changes channel
- When in Standby mode, switches TV On

13 Sound Mute
- Switches sound mute On or Off

14 Volume Up / Down

15 Input mode selection
- TV - switches Digital TV / Analogue TV mode ➡ **(p. 18)**
- AV - switches to AV input mode from Input Selection list ➡ **(p. 23)**

16 Aspect ➡ **(p. 21)**
- Changes aspect ratio

17 [VIERA Connect] ➡ **(p. 17)**
- Displays VIERA Connect home screen

18 Exit
- Returns to the normal viewing screen

19 Guide ➡ **(p. 22)**
- Displays TV Guide

20 Cursor buttons
- Makes selections and adjustments

21 Return
- Returns to the previous menu / page

22 Coloured buttons
- Used for the selection, navigation and operation of various functions

23 Hold
- Freeze / unfreeze picture ➡ **(p. 18)**

24 Index
- This button is not used for this model.

25 Last View ➡ **(p. 20)**
- Switches to previously viewed channel or input modes

26 Channel Up / Down
- Selects channel in sequence

27 Connected equipment operations ➡ **(p. 24, 55, 56, 64, 66)**

Auto Tuning

Search and store TV channels automatically.

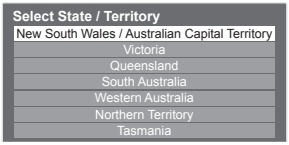
- These steps are not necessary if the setup has been completed by your local dealer.

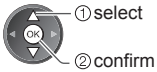
1 Plug the TV into mains socket and switch On

⏻/I

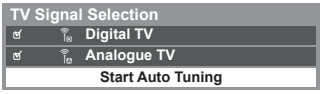
- You can now use the remote control to turn On the TV or switch the TV to Standby mode. (Power LED: On)

2 Select your area



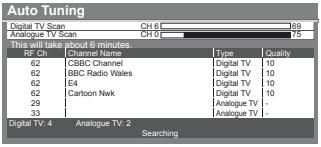


3 Start Auto Tuning



1 Select the TV Signal

☑ : tune
☐ : skip

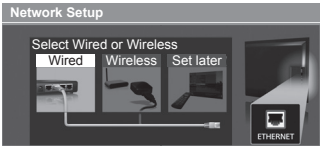


2 Select [Start Auto Tuning]

- Auto Tuning will start to search for TV channels and store them. The sorted channel order depends upon the TV signal, the broadcasting system and reception conditions.

4 Setup the network connection

Select the network type



[Wired] : wired connection
➡ (p. 15)
[Wireless] : wireless connection
➡ (p. 16)

- To setup later on or skip this step
  ➡ Select [Set later] or EXIT

5 Select [Home]

*

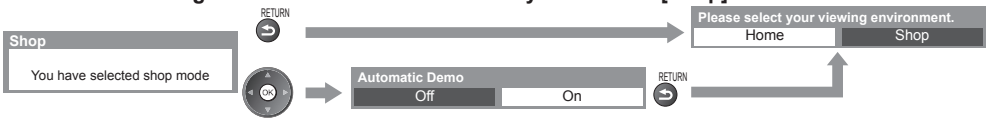
Auto Tuning is completed

∗Viewing environment mode

Home : Recommended mode for viewing at home. Select [Home] for optimal picture / power consumption. [Viewing Mode] is set as [Normal] (p. 33).

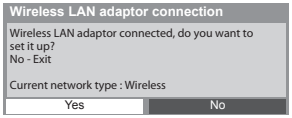
Shop : Demonstration mode to explain main features of this TV (for in-store display). [Viewing Mode] is set as [Dynamic] (p. 33).

To return to viewing environment selection mode if you selected [Shop]



- To change viewing environment mode later on, reset all settings by accessing Shipping Condition.
  ➡ **[Shipping Condition] (p. 50)**

If you connect the Wireless LAN Adaptor later on, the confirmation screen will be displayed for the setup.


Wireless LAN adaptor connection
Wireless LAN adaptor connected, do you want to set it up?
No - Exit
Current network type : Wireless
Yes
No

- To setup the Wireless LAN connection ➡ **(p. 74)**

Setup the network connection

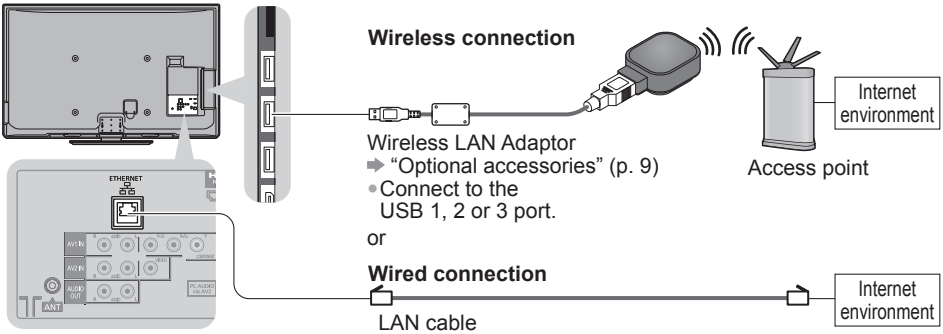
Set up the network connection to enable the network service functions such as VIERA Connect, etc. (p. 17, 78).

- To set up the wireless connection, the Wireless LAN Adaptor (optional accessory) is required.
- Please note that this TV does not support wireless public access points.
- Ensure the network connections and network environment are completed before starting setup.

1 **Connect the LAN cable or Wireless LAN Adaptor**

To enable the network service functions (VIERA Connect, etc.), you need to connect the TV to a broadband network environment.

Rear of the TV

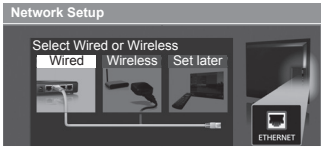


- If you do not have any broadband network services, please consult your retailer for assistance.
- For more information of the network connections (p. 70)

Caution

- To use the Wireless LAN Adaptor, an Access Point needs to be obtained.
- It is recommended to use the Wireless LAN Adaptor with the extension cable.
- To avoid radio wave interference, keep the TV away from the devices such as other wireless LAN devices, microwaves and the devices that use 2.4 GHz and 5 GHz signals when using the Wireless LAN Adaptor.
  Otherwise malfunction may occur.

2 **Select [Wired] or [Wireless]**

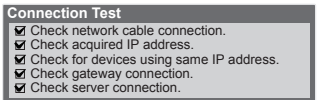


3 **Start the settings**

■ **[Wired]**

Select [Auto]

- To set manually, select [Manual] and set each item. For details ➡ **(p. 72 - 73)**



Automatically setup is done and the test of the network connection starts.

☑ **: succeeded**

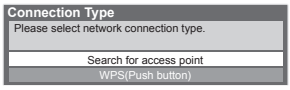
The test is successful and the TV is connected to the network.

☒ **: failed**

Check the settings and connections, and then select [Retry]

3 ■ **[Wireless]**

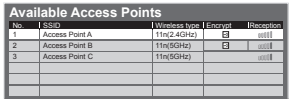
Select the connection type



- If your access point supports WPS (Push button), then select this option. If not, select [Search for access point].

■ **[Search for access point]**

Access points found automatically are listed.

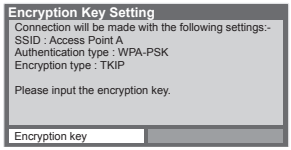


1 Select your desired access point

- To search access points again

- For the information of the highlighted access point

- To set manually (p. 74)


Encryption Key Setting
Connection will be made with the following settings:-
SSID : Access Point A
Authentication type : WPA-PSK
Encryption type : TKIP
Please input the encryption key.
Encryption key

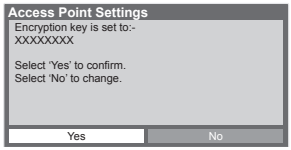
2 Access the encryption key input mode

- If the selected access point is not encrypted, the confirmation screen will be displayed. It is recommended to select the encrypted access point.

3 Enter the encryption key of the access point (Set characters one by one)

➡ Store

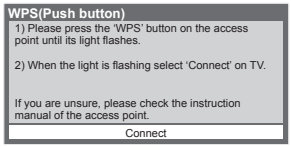
- You can set characters by using numeric buttons.



4 Select [Yes]

- To re-enter the encryption key, select [No].
- If the connection has failed, check the encryption key, settings and positions of your access point. And then, follow the on screen instructions.

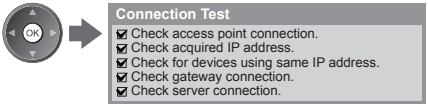
■ **[WPS(Push button)]**


WPS(Push button)
1) Please press the 'WPS' button on the access point until its light flashes.
2) When the light is flashing select 'Connect' on TV.
If you are unsure, please check the instruction manual of the access point.
Connect

Press the WPS button on the access point until the light flashes. And then, press the OK button to connect the Wireless LAN Adaptor and the access point.

- Ensure that your access point supports WPS for this method.
- WPS: Wi-Fi Protected Setup™

Perform the connection test after the access point setting is finished



☑ : succeeded

The test is successful and the TV is connected to the network.

☒ : failed

Check the settings and connections, and then select [Retry].

- To set manually, select [Manual] and set each item. For details ➡ **(p. 74)**

4 **Complete the network connection**

(Press twice)

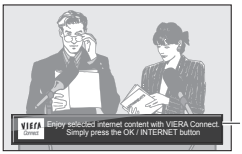
Using “VIERA Connect”

VIERA Connect is a gateway to the internet services unique to Panasonic and has expanded VIERA CAST features greatly.
VIERA Connect allows you to access some specific websites supported by Panasonic, and enjoy internet contents such as photos, videos, games, etc. from VIERA Connect home screen.

- This TV has no full browser function and all features of websites may not be available.

1 Turn power on

- Press for about 1 second
- Mains power On / Off switch should be On. (p. 11)



Every time you turn on the TV, VIERA Connect introduction banner appears. The banner is subject to change.

2 Access VIERA Connect

While the banner is displayed

or INTERNET / VIERA CAST

- The button design varies depending on the remote control.

Example :

- Depending on the usage conditions, it may take a while to read all the data.
- Messages might be displayed before VIERA Connect home screen.
  Please read these instructions carefully and follow the on screen instructions.

Example : VIERA Connect home screen

- To go to the next level
  ➡ [MORE]
- To back to the previous level
  ➡ [BACK]

■ To exit from VIERA Connect

EXIT

- To set the VIERA Connect instruction banner display off
  ➡ **[VIERA Connect Banner] (p. 39)**

■ How to operate VIERA Connect (current as of January, 2011)

- To move the cursor / select the item

- To access

- To return to the previous screen

RETURN

- When the key words are displayed on colour bar

R G Y B

- When options with numbers are displayed

1 2 3 4 5 6 7 8 9 0

- To return to VIERA Connect home screen

INTERNET / VIERA CAST

- Video communication requires an exclusive Communication Camera TY-CC10W.
  ➡ **“Optional accessories” (p. 9)**
  For details, read the manual of the Communication Camera.
- You can connect a keyboard and a gamepad via USB port for character input and playing games in VIERA Connect.
  You can also operate the TV with a keyboard or a gamepad other than VIERA Connect features.
  For more information ➡ **“USB connection” (p. 93)**

Note

- If you cannot access VIERA Connect, check the network connections and settings (p. 15 - 16).
- For more information of VIERA Connect ➡ **(p. 78)**

Watching TV

- When the TV is switched to standby, there will be a clicking sound after a short delay. This is normal.

1 Turn power on

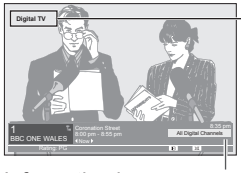
- Mains power On / Off switch should be On. (p. 11)

■ VIERA Connect banner appears

You can access to VIERA Connect and enjoy the various contents.

- To remove this banner, leave for about 5 seconds or press any buttons (except the buttons to access VIERA Connect).
- To set this banner display off
  ➡ **[VIERA Connect Banner] (p. 39)**

2 Select Digital TV or Analogue TV mode



The selected mode is displayed.

Information banner appears whenever you select a channel

- For details ➡ **(p. 19)**

- It is also possible to select the mode pressing the TV button repeatedly on the side panel of the TV. (p. 11)

3 Select a channel

CH up / down or 1 2abc 3def 4ghi 5jkl 6mno 7pqrs 8tuv 9wxyz 0

- To select the two or three-digit channel number, e.g. 112
  1 1 2abc (in a short time)
- If one or two-digit channel number, e.g. 39
  3def 9wxyz OK
  (quickly changes the channel)

■ To select from the Channel List

OK

All Digital Channels	
6	Cartoon Nwk
7	BBC Radio Wales
8	BBC Radio Cymru
1	BBC ONE Wales
2	BBC THREE
3	BBCi
4	CBBC Channel

OK
① select channel
② watch

Other useful functions

Hold	Display subtitles
Freeze / unfreeze picture	**Display / hide subtitles** (if available)
HOLD	STTL
	• Subtitles may not be displayed properly in 3D images.

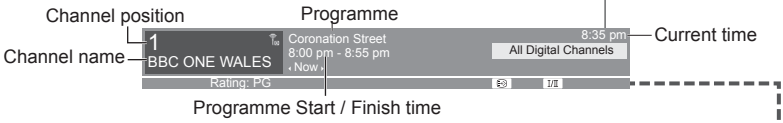
Display Information banner

Display Information banner

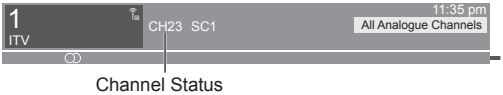
INFO

- Also appears when changing a channel

Digital TV mode



Analogue TV mode



Features available / Message meanings

	Sound mute On		Subtitle service available (Digital TV mode)
[Rating]	Rating information ➡ **(p. 87)** (Digital TV mode)	I/II	Multiple image or audio available (Digital TV mode)
[Bad signal]	Poor TV signal quality (Digital TV mode)	◌, I, II, ▽	Audio mode (p. 87) (Analogue TV mode)
[Encrypted]	Scrambled programme (Digital TV mode)	**1 - 90**	Off Timer remaining time • For settings ➡ (p. 20)
[AD]	Audio Description service available • This function can aid visually-impaired viewers by adding an additional audio track to describe events on-screen. • For settings ➡ **(p. 37)**		

- To confirm another tuned channel name

- To watch the programme listed in the banner

- Information on the next programme (Digital TV mode)

- To select a favourite list (Digital TV mode)
  (if the favourite list is created in [Favourites Edit] ➡ p. 42)

B

- To update the TV software (if available)

R

- To hide

EXIT

- Extra information (press again to hide the banner) (Digital TV mode)

INFO

- To set display timeout
  ➡ **[Banner Display Timeout] (p. 39)**

Display the selectable settings for the current programme

1 Check or change the current programme status instantly

OPTION

2 Select

3 Change

[Audio Description] (Digital TV mode)
Set to [Auto] if the programme has Audio Description service, then you will hear an additional audio track to describe events on screen
- To adjust the volume for Audio Description ➡ **[Audio Description Menu]** (p. 37)

[Audio Selection] (Digital TV mode)
Allows you to select between alternative languages for sound tracks (if available)

[Dual Audio] (Digital TV mode)
Selects multiplex sound (if available)

[MPX] (Analogue TV mode)
Selects multiplex sound (if available) ➡ **[Sound Menu] (p. 36)**

[Volume Correction]
Adjusts the volume of an individual channel or input mode ➡ **[Sound Menu] (p. 36)**

[Safely Remove USB]
Takes this operation to remove the connected USB device safely from the TV

Last view

Switch to previously viewed channel or input mode easily

LAST VIEW

- Press again to return to the present view.

Note

- Switching channel is not available while Direct TV Recording is in progress.
- Watching less than 10 seconds is not regarded as the previously viewed channel or input mode.

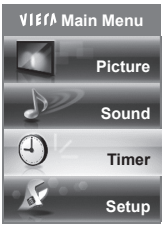
Off Timer

Turn the TV off automatically after a fixed period of time [Off / 15 / 30 / 45 / 60 / 75 / 90 minutes]

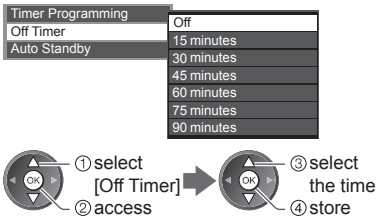
1 Display the menu

MENU

2 Select [Timer]



3 Select [Off Timer] and set the time



- To cancel ➡ Set to off or turn the TV off.
- To display the remaining time ➡ “Display Information banner” (p. 19)
- When the remaining time is within 3 minutes, the remaining time will flash on screen.

Change aspect ratio

Enjoy viewing the image at its optimum size and aspect.

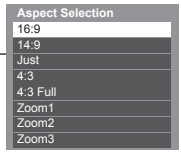
Press repeatedly until you reach the desired mode

ASPECT

■ If Aspect Selection list is displayed

1 Display Aspect Selection list

ASPECT

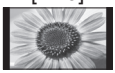


2 While the list is displayed, select the mode

[16:9]

Directly displays the image at 16:9 without distortion (anamorphic).

[14:9]



Displays the image at the standard 14:9 without distortion.

[Just]

Displays a 4:3 image full-screen. Stretching is only noticeable at the left and right edges.

[4:3]

Displays the image at the standard 4:3 without distortion.

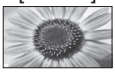
[4:3 Full]

Displays a 4:3 image enlarged horizontally to fit the screen.
- Digital TV mode or HD signal

[Zoom1]

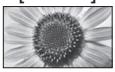
Displays a 16:9 letterbox or 4:3 image without distortion.

[Zoom2]



Displays a 16:9 letterbox (anamorphic) image full-screen without distortion.

[Zoom3]



Displays a 2.35:1 letterbox (anamorphic) image full-screen without distortion. At 16:9, displays the image at its maximum (with slight enlargement).

Note

- Only [16:9] and [4:3 Full] are available in Digital TV mode.
- Only [16:9] and [4:3] are available in PC input mode.
- Aspect is fixed to [16:9] when [Viewing Mode] is set to [Game] in the Picture Menu.
- Aspect cannot be changed in 3D mode (aspect is fixed to [16:9] when [3D Mode Selection] is set to [2D→3D]).
- Aspect mode can be memorised separately for each SD (Standard definition) and HD (High definition) signals except in Digital TV mode.

[Region Select] - Adjust the standard time

Select the region where you live to adjust the standard time.
- The time contained in the broadcast signal is UTC (Universal Time coordinated) formally known as GMT (Greenwich Mean Time).

[Daylight Saving Time] - Adjust for Summer Time

Select time offset from the standard time for Summer Time.
- Normally select [Auto].
- If there is a gap between displayed time and actual time, set this function.

Region	Standard time	Daylight Saving Time: Auto (During Summer Time)
NSW / ACT	+10:00	+11:00
Victoria		
Queensland	+10:00	
South Australia	+9:30	+10:30
Western Australia	+8:00	
Northern Territory	+9:30	
Tasmania	+10:00	+11:00

(Based on GMT)

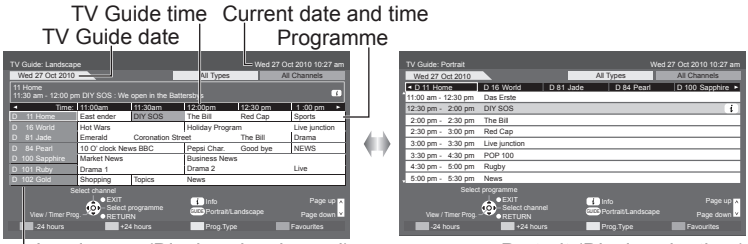
- These items can be set from [Other settings] in the Setup Menu. (p. 40)

Using TV Guide (Digital TV mode)

Using TV Guide enables you to select a programme easily, view programme information, etc.
TV Guide - Electronic Programme Guide (EPG) provides an on screen listing of the current and future programmes over the next seven days depending on broadcasters.

View TV Guide

Each time pressed, the layout will be changed. (Landscape / Portrait)



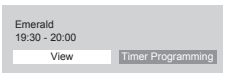
Landscape (Displays by channel)
Channel position and name

Portrait (Displays by time)

■ To watch the programme

Select the current programme or channel

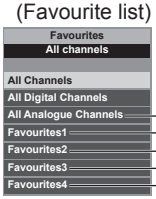
Select "View"



- To use Timer Programming ➡ **(p. 45)**

■ To view a channel list of the selected favourite list B

(Favourite list)

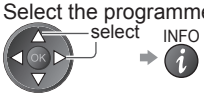


Only Analogue TV channels are listed

- To list favourite channels ➡ **(p. 42)**

■ To view details of the programme

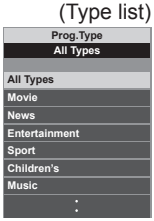
Select the programme



- Press again to return to TV Guide.

■ To view a channel list of the selected type Y

(Type list)



■ To the previous day R

■ To the next day G

■ To return to TV

EXIT

Note

- When this TV is turned on for the first time, or the TV is switched off for more than a week, it may take some time before the TV Guide is completely shown.

Watching External Inputs

Connect the external equipment (VCRs, DVD equipment, PC, etc.) and you can watch through the input.
- To connect the equipment ➡ **(p. 10, 84 - 86)**

1 Display the Input selection menu

2 Select the input mode connected to the equipment

Example (AV2)

Input Selection
AV1
AV2
AV3
PC
HDMI1
HDMI2
HDMI3
HDMI4
TV
SD Card/USB

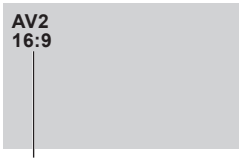
Example (PC)

Input Selection
AV1
AV2
AV3
PC
HDMI1
HDMI2
HDMI3
HDMI4
TV
SD Card/USB

- You can also select the input using the AV button on the remote control or the side panel of the TV (p. 11).
  Press the button repeatedly until the desired input is selected.
- You can label or skip each input mode ➡ **[Input Labels] (p. 49)**
  Skipped inputs will not be displayed when the AV button is pressed.

3 View

Example (AV2)



- If the external equipment has an aspect adjustment function, set to [16:9].

Example (PC)

- You can also listen to PC sound with the audio cable connected.
  To connect ➡ (p. 86)
- You can setup some functions
  ➡ PC Setup (p. 38) in the Setup Menu.
- For HDMI-compatible PC, possible to connect to HDMI terminals (HDMI1 / HDMI2 / HDMI3 / HDMI4) by using HDMI cable (p. 88, 89).

■ To return to TV

TV

Operating the equipment with the TV remote control

The Panasonic equipment connected to the TV can be directly operated with the below buttons of this TV remote control.

POWER	**Standby** Set to Standby mode / Turn on
▶	**Play** Playback videocassette / DVD
■	**Stop** Stop the operation
⏮ ◀◀	**Rewind / Skip / Search** VCR: Rewind, view the picture rapidly in reverse DVD / video content: Skip to the previous track, title or chapter Press and hold to search backward
⏭ ▶▶	**Fast-forward / Skip / Search** VCR: Fast-forward, view the picture rapidly forward DVD / video content: Skip to the next track, title or chapter Press and hold to search forward
❚❚/▶	**Pause** Pause / Resume DVD: Press and hold to play at slow speed
CH ∨ ∧	**Programme Up / Down** Select programme
REC ●	**Record** Start recording

How to change the code for the type of the equipment

Each type of Panasonic equipment has its own remote control code.
Please change the code for each equipment you want to operate.
If you operate the USB HDD / SD Card recording (p.55, 56) or in Video mode of Media Player (p.64, 66) or the connected equipment in VIERA Link (p. 82), select the code “73”.

Press and hold POWER during the following operations

Enter the appropriate code (see table below) 1 2 3 4 5 6 7 8 9 0 ➡ Press ■

Type of the equipment	Code
DVD Recorder / DVD Player	70 (default)
Player theatre / Blu-ray Disc theatre	71
VCR	72
Using USB HDD / SD Card recording ➡ (p. 55, 56) Using in Video mode of Media Player ➡ (p. 64, 66) The equipment using in VIERA Link ➡ “VIERA Link Control” (p. 82)	73

Note

- Confirm if the remote control works correctly after changing the code.
- The codes may be reset to default values if batteries are replaced.
- Some operations may not be possible on some equipment models.

Viewing 3D images

You can enjoy viewing 3D images with contents or programmes corresponding to the 3D effect by wearing the 3D Eyewear ➡ “Optional accessories” (p. 9)

- For wearing the 3D Eyewear please read the manual of the 3D Eyewear.

This TV supports [Frame Sequential]*1, [Side by Side]*2 and [Top and Bottom]*3 3D formats.

*1: The 3D format that the images for the left and right eyes are recorded with the high definition quality and alternately played back

*2, *3: Other available 3D formats

Warning

About Prevention of Accidental Ingestion

- **Do not store any 3D Eyewear parts in places where small children can reach.**
  There is a danger small children could swallow such parts by mistake.
  - If a child accidentally swallows such parts, seek immediate medical attention.

About Prohibition of Disassembly

- **Do not disassemble or modify the 3D Eyewear.**

Caution

About 3D Eyewear

- **Do not drop, exert pressure on, or step on the 3D Eyewear.**
  Doing so may damage the glass section, which may result in injury.
  - Always store the 3D Eyewear in the case provided when not in use.
- **Be careful of the tips of the frame when putting on the 3D Eyewear.**
  Accidentally inserting the tip of the frame into the eye may cause injury.
- **Always keep the 3D Eyewear in a cool, dry place.**
  Failure to do so may cause fire or electric shock.
- **Be careful not to trap a finger in the hinge section of the 3D Eyewear.**
  Doing so may result in injury.
  - Pay special attention when children are using this product.

About Viewing of 3D Images

- **In the event that you experience dizziness, nausea, or other discomfort while viewing 3D images, discontinue use and rest your eyes.**
  When you set the effect by using [3D Adjustment], take into account that the vision of 3D images varies among different individuals.
- **Do not use the 3D Eyewear if you have a history of oversensitivity to light, heart problems, or have any other existing medical condition.**
  Using the 3D Eyewear may cause the symptoms to worsen.
- **Stop using the 3D Eyewear immediately if you feel tired, discomfort, or any other abnormality.**
  Continuing to use the 3D Eyewear in such cases may cause you to feel unwell. Please take the necessary rest before continuing use.
- **When watching 3D movies, take an appropriate length break after watching a movie.**
- **When watching 3D content on interactive devices such as 3D games or computers, take an appropriate length break after using for 30 - 60 minutes.**
  Prolonged use may cause eyesight fatigue.
- **When using the 3D Eyewear, be careful not to strike the television screen or other people by mistake.**
  As the images are in 3D, the distance between the user and screen may be mistaken, causing the user to strike the screen which may result in injury.
- **Use the 3D Eyewear when viewing 3D images.**
- **When using the 3D Eyewear, make sure your eyes are on an approximately horizontal level.**
- **If you suffer from myopia (short-sightedness), hyperopia (far-sightedness), astigmatism, or have eyesight differences between the left and right eyes, please use corrective glasses or other such methods to correct your eyesight before putting on the 3D Eyewear.**
- **Stop using the 3D Eyewear if you can clearly see double images when viewing 3D content.**
  Prolonged use may cause eyesight fatigue.
- **View the screen at a distance at least 3 times further than the effective height of the screen.**
  Recommended distance:
  For a 42-inch television, 1.6 m or more.
  For a 50-inch television, 1.9 m or more.
  Using the 3D Eyewear at a distance closer than the recommended distance may cause eyesight fatigue.

Using 3D Eyewear

- **As a guide, 3D Eyewear should not be used by children younger than about 5 - 6 years old.**
  As it is difficult to judge younger children's reactions to fatigue or discomfort, it may be difficult to prevent them from suddenly feeling unwell.
  - When this product is being used by a child, the parent or guardian should check to ensure that the child's eyes are not becoming tired.
- **When using the 3D Eyewear, do not place breakable objects near to the user.**
  The user may mistake the 3D objects they are viewing as real objects causing them to move, which may cause damage to surrounding objects that may lead to injury.
- **Do not move around while wearing the 3D Eyewear.**
  The surrounding area appears dark, which may result in falling or other accidents that may cause injury.
- **Only use the 3D Eyewear for the specified purpose.**
- **Do not use if the 3D Eyewear is cracked or broken.**
  Doing so may result in injury or eyesight fatigue.
- **If a malfunction or fault occurs in the 3D Eyewear, stop use immediately.**
  Continuing to use the 3D Eyewear may result in injury, eyesight fatigue, or may cause you to feel unwell.
- **Stop using the 3D Eyewear immediately if your skin feels unusual.**
  In rare cases, the paint or materials used in the 3D Eyewear may cause an allergic reaction.
- **Stop using the 3D Eyewear immediately if you experience any redness, pain, or itching on the nose or temples.**
  Prolonged use may cause such symptoms due to excess pressure, which may result in the user feeling unwell.

Using Precautions

Infra-red receiver section

- **Do not soil the infra-red receiver section or attach stickers etc. to it.**
  - Doing so may prevent the receiver from receiving signals from the television, which may prevent the 3D Eyewear from operating normally.
- **If the 3D Eyewear is affected by other infra-red data communication equipment, the 3D images may not be displayed correctly.**

Cautions during viewing

- **Do not use devices that emit strong electromagnetic waves (such as cellular phones or personal transceivers) near the 3D Eyewear. Doing so may cause the 3D Eyewear to malfunction.**
- **If the 3D Eyewear is used in a room in which fluorescent lights (50 Hz) are used, the light within the room may appear to be flickering. In this case, either darken or switch off the fluorescent lights when using the 3D Eyewear.**
- **Wear the 3D Eyewear correctly. 3D images will not be correctly visible if the 3D Eyewear is worn upside down or back-to-front.**
- **Other kinds of displays (such as computer screens, digital clocks, or calculators etc.) may be difficult to see while wearing the 3D Eyewear. Do not wear the 3D Eyewear when watching anything other than 3D images.**

Charging the 3D Eyewear (optional - rechargeable type)

To charge when the TV is in the Standby mode

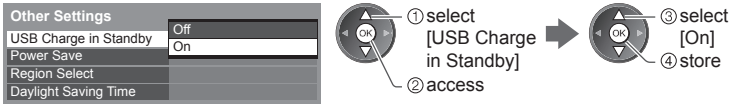
1. Display the menu

MENU ➡ “How to Use the Menu Functions” (p. 32)

2. Select [Setup]

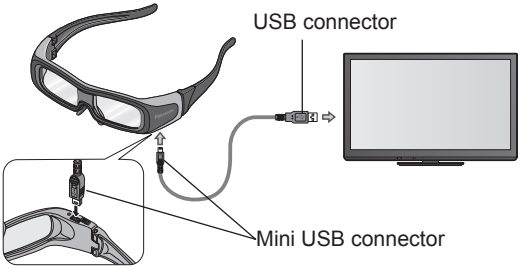
3. Select [Other Settings]

4. Select [USB Charge in Standby] and set [On]



5. Turn off the television power, and set the 3D Eyewear power switch to “OFF”

6. Connect as shown



- The indicator lamp lights red, and charging starts.
- When the indicator lamp turns off, charging is complete. (Approximately 2 hours required)

7. Remove the charging cable.

To charge when the TV is on

1. Turn off the television power, and set the 3D Eyewear power switch to “OFF”

2. Connect as shown above , and turn on the television power

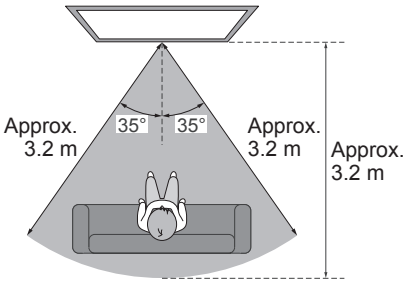
- The indicator lamp lights red, and charging starts.
- When the indicator lamp turns off, charging is complete. (Approximately 2 hours required)

3. Turn off the television power, and remove the charging cable

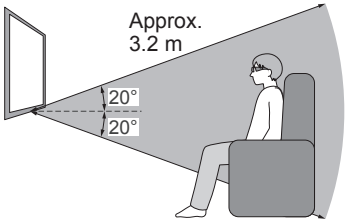
Available range for the 3D Eyewear

If the 3D Eyewear is placed outside the available area for about 5 minutes, the 3D Eyewear will be turned off automatically.

: Available area to use the 3D Eyewear



View from the top



View from the side

Note

- The range may be shortened depending on the obstacles between the infrared sensors on the TV and the 3D Eyewear, the dirt of the infrared sensors or the surrounding environment.
- If you do not look toward the TV screen for a while when viewing 3D images, the 3D Eyewear may be turned off automatically even if in the available area.

To view the 3D images

You can watch 3D images in the following cases:

- When a 3D image supporting Blu-ray Disc is played on a 3D image supporting player/recorder connected using a HDMI cable to a 3D image supporting television.
- 3D image supported broadcast (programme)
- 3D Photo, 3D Movie taken by LUMIX/Camcorder.
- 2D→3D (Converts 2D images into 3D) ➡ “Change the view 3D ↔ 2D” (p. 29)

To view the contents or programmes

1 Set the power switch to “ON”.
(The indicator lamp will light for approximately 2 seconds, then flash once approximately every 2 seconds.)

2 Put on the 3D Eyewear

3 Watch the 3D images
When the HDMI receives information in which 3D mode is detected, 3D images are automatically displayed according to the signal.
If the 3D images are not displayed correctly or the images cause discomfort, the images can be adjusted by [3D Mode Selection] or [3D Settings].
- Change the view 3D ↔ 2D, 3D settings (p. 29, 30)

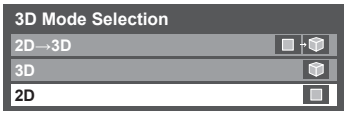
■ After Use

1 Set the 3D Eyewear power switch to “OFF”.
(The 3D Eyewear indicator lamp turns off, and the power turns off.)

2 After using the 3D Eyewear, store it in the case provided.

Change the view 3D ↔ 2D

Simply switches 3D ↔ 2D images (Auto mode)



("2D→3D": 2D mode only)

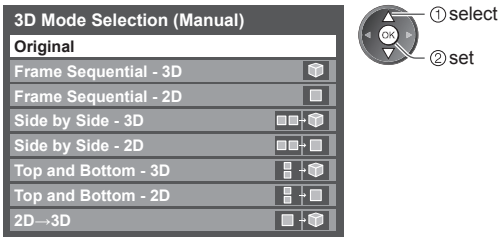
R
• ➡ Switches to Manual mode (see below)

■ Change 3D format (Manual mode)

1 Display [3D Mode Selection (Manual)]

R

2 Press 3D to cycle through the 3D format



(example)

Table of images that can be seen for each [3D Mode Selection (Manual)] and the source image format

If the picture appears to be abnormal, refer to the table below to choose the correct 3D mode.

[3D Mode Selection] / Source image format	[Original]	[Frame Sequential - 3D]	[Side by Side - 3D]	[Top and Bottom - 3D]	[2D→3D]
Frame Sequential		Normal 3D*1			
Side by Side (Full)			Normal 3D*1		
Side by Side			Normal 3D*1		
Top and Bottom				Normal 3D*1	
Normal format (2D)					Normal 3D

*1 : When selecting [Frame Sequential - 2D], [Side by Side - 2D] or [Top and Bottom - 2D], the images will be displayed without 3D effect.

• Depending on the player or broadcasts, the image may be different from the above illustrations.

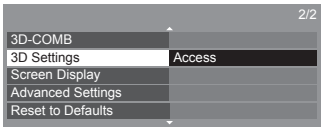
[3D Settings] (Adjust 3D images)

1 Display the menu

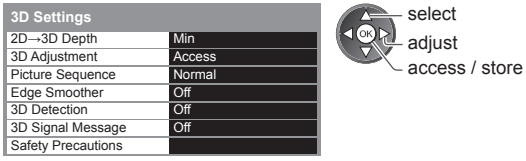
MENU ➡ “How to Use the Menu Functions” (p. 32)

2 Select [Picture]

3 Select [3D Settings]



4 Select the item and set



■ 3D Adjustment

Changes 3D depth by adjusting left-right parallax.

1 Set “On” and adjusts “Effect”

3D Adjustment (On/Off)
Effect (-3 to +3)

Item	Battery status
2D→3D Depth	Adjusts 3D depth. Available only when [2D→3D] is selected in [3D Mode Selection]. **[Min] / [Mid] / [Max]**
3D Adjustment	See above. (3D adjustment [On] / [Off]), Effect ([-3] to [+3])
Picture Sequence	Selects [Reverse] if you feel that the sense of depth is unusual. **[Normal] / [Reverse]**
Edge Smoother	Select [On] if you feel the contoured parts of an image are not smooth enough. **[Off] / [On]**
3D Detection	**[On]:** When the HDMI receives information in which 3D mode is detected, 3D images are automatically displayed according to the signal. (Switching may not occur depending on the signal.) **[Off] / [On (Advance)]**
3D Signal Message	**[On]:** Displays a message according to the signal received by the [3D Detection]. **[Off] / [On]**
Safety Precautions	Displays the precautions for viewing 3D images.

*The perceived three dimensional effects of the 3D Eyewear differ from person-to-person.
*If a signal received from an external device is different from the 3D setting of the TV, such as 2D signal when the TV is set to 3D mode, the images may not be displayed correctly.

How to Use VIERA TOOLS

You can access some special features easily by using the VIERA TOOLS function.

1 Display icons of the feature

2 Select a feature

① select
② access

■ **To return to TV**

EXIT or VIERA TOOLS

■ **Follow the operations of each feature**

[VIERA Link Control]
➡ **"VIERA Link Control" (p. 82)**

When two or more compatible equipment are connected, a selection screen will be displayed. Please select the correct description and access.

[Photo]*
➡ **"Photo mode" (p. 59)**

[Video]*
➡ **"Video mode" (p. 63)**

[Recorded TV]*
➡ **"Recorded TV mode" (p. 65)**

[Music]*
➡ **"Music mode" (p. 68)**

[VIERA Connect]
➡ **"Using "VIERA Connect"" (p. 17)**

[Media Server]*
➡ **"Using DLNA® features" (p. 75)**

* When two or more available devices are connected, a selection screen will be displayed. Please select the correct description and access.

Note

- If the selected feature is not available, the demonstration to explain how to use it can be displayed. Press the OK button to view the demonstration after selecting the unavailable feature.

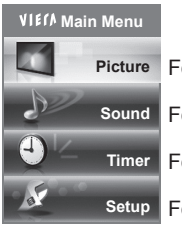
How to Use the Menu Functions

Various menus allow you to make settings for the picture, sound, and other functions.

1 Display the menu

- Displays the functions that can be set (varies according to the input signal)

2 Select the menu



For details ➡ (p. 33)

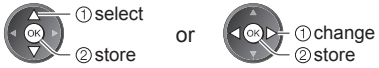
For details ➡ (p. 36)

For details ➡ (p. 37)

For details ➡ (p. 38)

3 Select the item

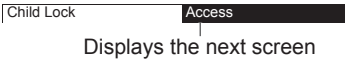
4 Adjust or select



■ Choose from among alternatives

■ Adjust using the slide bar

■ Go to the next screen



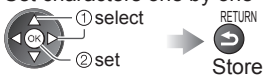
■ To reset the settings

- To reset the picture settings only
  ➡ **[Reset Picture Defaults] in the Picture Menu (p. 35)**
- To reset the sound settings only
  ➡ **[Reset Sound Defaults] in the Sound Menu (p. 37)**
- To initialise all settings
  ➡ **[Shipping Condition] in the Setup Menu (p. 50)**

■ Enter characters by free input menu

You can enter names or numbers freely for some items.

Set characters one by one



- To delete a character ➡ R
- To delete all characters ➡ B
- You can set characters by using numeric buttons.

Every press changes the character by one. Leave it for a second to set the character, or press OK or any numeric button within a second. (Corresponding characters for each numeric button)

Numeric buttons	Characters	Numeric buttons	Characters
1	. 1 ! : # + - * _ ( )	6mno	m n o 6 M N O
2abc	a b c 2 A B C	7pqrs	p q r s 7 P Q R S
3def	d e f 3 D E F	8tuv	t u v 8 T U V
4ghi	g h i 4 G H I	9wxyz	w x y z 9 W X Y Z
5jkl	j k l 5 J K L	0	Space 0

■ To return to TV at any time

EXIT

■ To return to the previous screen

RETURN

■ To change menu pages

Note

- In each Viewing Mode and input, [Contrast], [Brightness], [Colour], [Sharpness], [Tint], [Colour Balance], [Vivid Colour], [Eco Mode], [P-NR] and [3D-COMB] can be adjusted and stored to suit your particular viewing requirement.
- Set for each input signal.

Item	Adjustments / Configurations (alternatives)
Viewing Mode • Dynamic • Normal • Cinema • True Cinema • Game • Photo	Basic picture mode **[Dynamic]:** Provides enhanced picture contrast and sharpness when viewing in a bright room. **[Normal]:** Recommended for viewing under normal ambient room lighting conditions. **[Cinema]:** For watching movies in a darkened room with improving the performance of contrast, black and colour reproduction **[True Cinema]:** Precisely reproduces the original quality of the image without any revision. **[Game]:** Fast response signal specifically to provide suitable images for playing games • Not valid on TV mode • A continuous record of time spent using Game mode can be displayed in the top right of the screen. ➡ [Playing Time Display] (p. 39) **[Photo]:** Set [Reversal Film] to [On] to provide the suitable image quality for photos • For HDMI input, Media Player and Network service operations
Contrast	Increases or decreases the levels of these options according to your personal preference
Brightness	
Colour	
Sharpness	
Tint	The picture hue can be adjusted to suit your taste • For NTSC signal, Component or HDMI input
Colour Balance • Cool • Normal • Warm	Allows you to set the overall colour tone of the picture • Not valid when [Viewing Mode] is set to [True Cinema]
Vivid Colour • Off • On	Automatically adjusts colours to vivid ones • Not valid on PC signal
Reversal Film • Off • On	Provides the picture effect such as the reversal film • This function is available when [Viewing Mode] is set to [Photo].
Colour Remaster • Off • On • Auto	**[Off]:** Display it in input source of colour gamut **[On]:** Display it in expand input source of colour gamut **[Auto]:** Auto-fit • When Viewing Mode is [True Cinema], this menu item is not displayed.
Eco Mode • Off • On	Automatically adjusts the screen brightness appropriately as the surrounding light level lowers to reduce the power consumption • Not available in 3D Mode • Not available in Shop mode (Dynamic picture mode)
P-NR • Off • Min • Mid • Max	Picture Noise Reduction Automatically reduces unwanted picture noise and flicker noise in the contoured parts of a picture • Not valid on PC signal.

3D-COMB • Off • On			Makes still or slow moving pictures look more vivid ● Occasionally, while viewing still or slow moving pictures, colour patterning may be seen. Set to [On] to display sharper and more accurate colours. ● For PAL or NTSC signal reception only ● Not valid on Component, PC, HDMI and Media Player
3D Settings			Adjusts and sets to view 3D images (p. 30)
Screen Display • Off • On			Turns the screen off when you select [Off] ● The sound is active even if the screen turns off. ● Press any buttons (except Standby) to turn the screen on. ● This function is effective in reducing power consumption when listening to the sound without watching the TV screen.
Advanced Settings	**White Balance**[*1]	**R-Gain**	Adjusts the white balance of bright red area
		G-Gain	Adjusts the white balance of bright green area
		B-Gain	Adjusts the white balance of bright blue area
		R-Cutoff	Adjusts the white balance of dark red area
		G-Cutoff	Adjusts the white balance of dark green area
		B-Cutoff	Adjusts the white balance of dark blue area
		Reset White Balance	Press the OK button to reset to the default White Balance
	Gamma[*1]	**Gamma** • S Curve / 1.8 / 2.0 / 2.2 / 2.4 / 2.6	Switches the gamma curve ● Please note the numerical values are reference for the adjustment.
		Reset Gamma	Press the OK button to reset to the default Gamma
	Intelligent Frame Creation • Off • Mid • Max		Automatically compensates the picture frame rate and removes juddering movements to make the images smooth and clear ● Depending on the contents, images may be noisy. To prevent the noise, change the setting. ● This function is not available for selection (default to [Off]) when [Viewing Mode] is set to [Game] or in the mode of PC input or Network service operations.
	24p Smooth Film • Off • Mid • Max		Automatically compensates the picture frame rate to make the 24p source movie images smooth ● This is available only for 24p signal input and displayed instead of [Intelligent Frame Creation]. ● This function is not available for selection (default to [Off]) when [Viewing Mode] is set to [Game] or in the mode of PC input or Network service operations.
	Film Cadence Detection • Off • On		Automatically makes the film source movie images clear

Advanced Settings	**3D Refresh Rate** • Auto • 100Hz • 120Hz	Changes the setting of the high-speed motion picture response
	Resolution Enhancer • Off • Mid • Max	Enhances the picture resolution to make the image sharper • This function is available for SD (Standard definition) signal. • As for HD (High definition) signal, this function is available when aspect mode is set to [16:9] ([16:9 Overscan] is set to [On]), [4:3 Full] or [Zoom]. • Not valid on VIERA Connect and Media Player
	Side Panel • Off • Low • Mid • High	Increases the brightness of the side panel • The recommended setting is [High] to prevent panel “image retention”.
	16:9 Overscan • Off • On	**[On]:** Default - Image is overscanned by ~5% beyond the edge of the screen to hide edge video noise **[Off]:** Displays image in its original size including edge video noise such as lines, dashes, dots etc. • Applicable for video signals when TV aspect is set to [16:9] • Memorised separately for SD and HD channels / signals
	DVI Input Setting • Normal • Full	Changes the black level in the image for HDMI input mode with DVI input signal manually • When the DVI input signal from the external equipment, especially from PC, is displayed, the black level may not be suitable. In this case, select [Full]. • The black level for HDMI input signal will be adjusted automatically. • For HDMI input mode with DVI input signal only
	Pixel Orbiter • Auto • On	Selects the mode for wobbling of the image to prevent panel “image retention” **[Auto]:** Automatically works only for the appropriate images and you rarely recognise the wobbling.
	Scrolling Bar	Scrolls the vertical bar to prevent panel “image retention” • Press the OK button to start scrolling and press any buttons (except Standby) to exit this mode.
Reset Picture Defaults		Press the OK button to reset the present Picture Viewing Mode of the selected input to the default settings

*1 : PC input mode only

Item	Adjustments / Configurations (alternatives)
Mode • Music • Speech • User	Selects basic sound mode • The selected mode affects all input signals. **[Music]:** Improves sound quality for watching music videos, etc. **[Speech]:** Improves sound quality for watching news, drama, etc. • In Music and Speech modes, you can adjust [Bass] and [Treble] settings, and those settings will be stored for each mode. **[User]:** Adjusts the sounds manually by using the equaliser to suit your favourite sound quality. • For the User mode, [Equaliser] will appear on the Sound Menu instead of [Bass] and [Treble]. Select the [Equaliser] and adjust the frequency. ➡ [Equaliser] (below)
Bass	Increases or decreases level to enhance or minimise lower, deeper sound output
Treble	Increases or decreases level to enhance or minimise sharper, higher sound output
Equaliser	Adjusts the frequency level to suit your favourite sound quality • This function is available when [Mode] is set to [User]. • Select the frequency and change the frequency level by using the cursor button. • If you want to enhance the bass sound, raise the level of the lower frequency. If you want to enhance the treble sound, raise the level of the higher frequency. • To reset the levels of each frequency to the default settings, select the [Reset Equaliser Settings] by using the cursor button, and then press the OK button.
Balance	Adjusts the volume level of right and left speakers
Headphone Volume	Adjusts the volume of the headphones
Surround • Off • V-Audio • V-Audio Surround • V-Audio ProSurround	Surround sound settings **[V-Audio]:** Provides a dynamic enhancer of width to simulate improved spatial effects **[V-Audio Surround]:** Provides a dynamic enhancer of width and depth to simulate improved spatial effects **[V-Audio ProSurround]:** Provides a three-dimensional sound space with digital reverb effects
Auto Gain Control • Off • On	Adjusts the current volume level if it is extremely different from the previous viewed channel or input mode
Volume Correction	Adjusts the volume of individual channel or input mode
Speaker Distance to Wall • Over 30cm • Up to 30cm	Adjusts the low frequency sound • If the back space between the TV and wall is over 30 cm, [Over 30cm] is recommended. • If the back space between the TV and wall is within 30 cm, [Up to 30cm] is recommended.
MPX • Stereo • Mono • M1 • M2	Selects multiplex sound mode (if available) **[Stereo]**: Use this normally **[Mono]**: When stereo signal cannot be received **[M1]** / **[M2]**: Available while mono signal is transmitted • Analogue TV mode only

Digital Audio Preference • Dolby D • MPEG		Selects the initial setting for audio tracks If programme has both Dolby Digital and MPEG audio tracks, priority is given to what you select **[Dolby D]:** A method of coding digital signals developed by Dolby Laboratories. Apart from stereo (2ch) audio, these signals can also be multi-channel audio. **[MPEG]:** An audio compression method that compresses audio to small size without any considerable loss of audio quality. ● Digital TV mode only
SPDIF Selection • Auto • PCM		SPDIF: A standard audio transfer file format Selects the initial setting for digital audio output signal from DIGITAL AUDIO OUT terminal **[Auto]:** Dolby Digital Plus, Dolby Digital and HE-AAC (48 kHz) multi-channel are output as Dolby Digital Bitstream. MPEG is output as PCM. **[PCM]:** Digital output signal is fixed to PCM. ● For Digital TV mode, Video mode (p. 63) or Network video contents (p. 78)
HDMI1 / 2 / 3 / 4 Input • Digital • Analogue		Selects to fit the input signal (p. 89) **[Digital]:** HDMI cable connection **[Analogue]:** HDMI-DVI adaptor cable connection ● HDMI input mode only
Audio Description Menu	**Audio Description** • Off • Auto	Useful for visually-impaired viewers Sets to [Auto] to activate the description sound track if available ● The availability of audio description sound track is indicated by [AD] in the information banner (p. 19). ● Digital TV mode only
	Volume	Adjusts the volume for Audio Description ● Digital TV mode only
	Speakers • Off • On	Sets to [On] to activate the description sound track from TV speakers ● Digital TV mode only
	Headphones • Off • On	Sets to [On] to activate the description sound track from headphones ● Digital TV mode only
Reset Sound Defaults		Press the OK button to reset settings of the present [Mode], [Balance], [Headphone Volume] and [Surround] in the Sound Menu to the default

Item	Adjustments / Configurations (alternatives)
Timer Programming	Sets a timer to remind watching or record forthcoming programmes (p. 45) ● Digital TV mode only
Off Timer • Off • 15 / 30 / 45 / 60 / 75 / 90 minutes	Sets the time until the TV automatically goes into Standby mode
Auto Standby • Off • 2 / 4 hours	Sets the time the TV automatically goes into Standby mode when no operation is performed for the selected times ● Automatic input switching with the connected equipment affects this function and time-count will be reset. ● The notification message will appear 3 minutes before going into Standby mode.

Item		Adjustments / Configurations (alternatives)
PC Setup	**Input Resolution**	Switches to a wide view • VGA (640 × 480 pixels), WVGA (852 × 480 pixels), XGA (1,024 × 768 pixels), WXGA (1,280 × 768 pixels, 1,366 × 768 pixels) • Options change depending on signals
	Clock	Sets to the minimum level if noise occurs.
	H-pos	Adjusts horizontal position
	V-pos	Adjusts vertical position
	Clock Phase	Eliminates flicker and distortion • Adjust after Clock adjustment • Set to the minimum level if noise occurs
	Sync • H & V • SOG	PC sync signal type **[H & V]:** by the horizontal and vertical signals from your PC **[SOG]:** Sync on Green sync from your PC
	Reset PC Settings	Press the OK button to reset the PC Setup settings to the default
Eco Navigation		Automatically sets the TV to the most suitable energy-saving mode • If you press the OK button, the following items are set as below: [Eco Mode], [VIERA Link], [Power off Link], [Standby Power Save], [Power Save] ➡ [On] [Intelligent Auto Standby] ➡ [On (No reminder)] [Auto Standby] ➡ [2 hours]
DVI Position Settings	**H-pos**	Adjusts horizontal position settings of DVI
	V-pos	Adjusts vertical position settings of DVI
	Reset DVI Position Settings	Press the OK button to reset the DVI Position Settings to the default.
Child Lock		Locks a channel / AV input to prevent access to it (p. 48)
Recording Setup		Formats the connected USB HDD / insert SD card and sets the condition (p. 52, 54)

Tuning Menu	**Favourites Edit**	Creates a list of favourite channels (Digital TV mode) (p. 42)
	Channel List	Skips the unwanted channels or edits channels (p. 42, 44)
	Auto Tuning	Sets all Digital TV or Analogue TV channels automatically (p. 43, 44)
	Manual Tuning	Sets the TV channels manually (p. 43, 44)
	Update Channel List	Updates the channel list while keeping your settings (Digital TV mode) (p. 43)
	New Channel Message • Off • On	Selects whether to give a notification message when a new channel is found (Digital TV mode) (p. 43)
	Signal Condition	Checks the Digital TV signal condition (p. 43)
	Add TV Signal	Adds the TV mode ● This function is available if you skip any modes to tune in [Auto Tuning] for first using the TV. ● To operate, refer to the [Auto Tuning] operations for first using the TV (p. 13).
Display Settings	**Teletext**	The item is not used for this model.
	Input Labels	Labels or skips each input terminal (p. 49)
	Banner Display Timeout • 0 (No display) • 1 / 2 / 3 / 4 / 5 / 6 / 7 / 8 / 9 / 10 seconds	Sets how long the information banner stays on screen (p. 19)
	VIERA Connect Banner • Off • On	Sets the VIERA Connect introduction banner display (p. 19)
	Playing Time Display • Off • On	Sets to [On] to display a continuous record of time spent using Game mode every 30 minutes ● This function is available when [Game] is selected in [Viewing Mode] (p. 33).

VIERA Link Settings	**VIERA Link** • Off • On	Sets to use VIERA Link functions ● VIERA Link functions become available when [VIERA Link] is set to [On] (p. 80).
	HDMI Content Type • Off • Auto	Adjusts the picture settings according to the content type from the connected equipment via HDMI cable ● This function is available if the connected equipment supports HDMI Content Type. ● The content type information will be displayed for several seconds when this function works.
	Power on Link • Off • On	Sets to use Power on Link functions (p. 80)
	Power off Link • Off • On	Sets to use Power off Link functions (p. 80)
	Standby Power Save • Off • On	Controls the power consumption in Standby mode of the connected equipment to reduce the power consumption (p. 80) ● This function is available when [VIERA Link] is set to [On] and [Power off Link] is set to [On].
	Intelligent Auto Standby • Off • On (With reminder) • On (No reminder)	Makes non-watched or non-used connected equipment go into Standby mode to reduce the power consumption (p. 80) ● This function is available when [VIERA Link] is set to [On].
Network Setup		Sets the network setting to use in your network environment (p. 71)
DivX® VOD		Displays DivX VOD registration code (p. 92)
System Menu	**Shipping Condition**	Resets all settings to the original condition (p. 50)
	System Update	Downloads new software to this TV (p. 51)
	Software Licence	Displays the software licence information
	System Information	Displays the system information of this TV
Other Settings	**USB Charge in Standby** • Off • On	Sets to use the USB Charge functions (p. 27) **[On]:** Available to charge by using any USB terminal after going into standby mode (Active Standby Mode) ● Go into standby mode after 5 hours.
	Power Save • Off • On	Reduces brightness of the picture to economise on power consumption
	Region Select • NSW/ACT • Victoria • Queensland • South Australia • Western Australia • Northern Territory • Tasmania	Selects the region where you live to adjust the standard time (p. 21)
	Daylight Saving Time • Auto • Off • +1/2 hour • +1 hour	Selects time offset from the standard time for Summer Time (p. 21) ● Set to [Auto] normally.

● A different menu will be displayed in the mode of Media Player / Network service operations. (p. 57 - 78)
● Only available items can be selected.

Tuning and Editing Channels

You can make Auto Tuning, listing your favourite channels, skipping unwanted channels, etc.

Preparations:

1 Select Digital TV or Analogue TV

TV

2 Display the menu

MENU

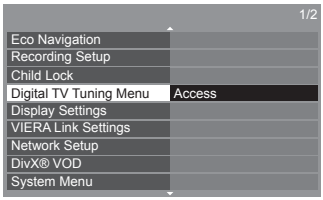
3 Select [Setup]

OK

- The selected mode is displayed on the screen (p. 18).

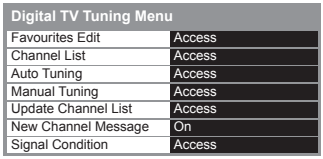
■ **When you select Digital TV**

1 **Select [Digital TV Tuning Menu]**



①select
②access

2 **Select a function**

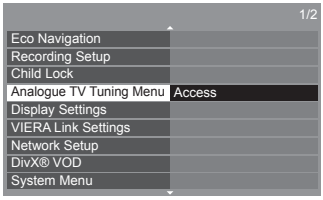


①select
②access or set

- For details ➡ **(p. 42 - 43)**

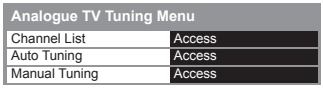
■ **When you select Analogue TV**

1 **Select [Analogue TV Tuning Menu]**



①select
②access

2 **Select a function**



①select
②access

- For details ➡ **(p. 44)**

■ **To return to TV**

EXIT

For Auto Tuning, using the buttons on the side panel of the TV (p. 11)

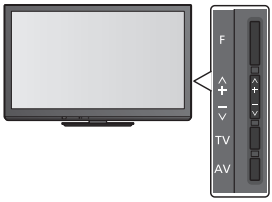
1 Press repeatedly until [Auto Tuning] appears F

2 Access [Auto Tuning] TV

3 Start [Auto Tuning] TV

- To return to TV

F

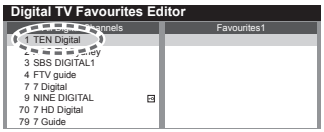


Digital TV Tuning Menu

[Favourites Edit] - List favourite channels

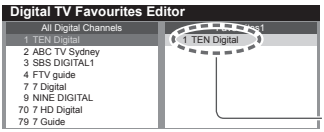
Create your favourite channel lists (Favourites) from various broadcasters (up to 4: [Favourites]1 to 4). The Favourites lists are available from the Information banner (p. 19) and the TV Guide (p. 22).

1 Select a channel to list



select

2 Add it to the Favourites list



3 Store

RETURN

A channel is added

- To display other Favourites G
- To add all channels to the list Y

■ **To edit list**

Select the field of Favourites to edit and:

- To name the Favourites

R ➡

(maximum: ten characters)

① select ② set ➡ Store RETURN

You can set characters by using numeric buttons (p. 32).

- To move the channel

G ➡ Select the new position or ➡ Confirm G

- To delete the channel
- To delete all channels Y

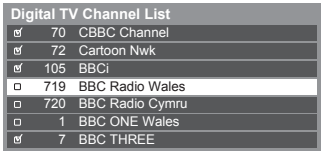
Note

- Channel numbers are defined by the broadcaster and cannot be changed.
- Hidden channels (see below) can be selected but not viewed.

[Channel List] - Skip unwanted channels, Edit Channels

You can hide unwanted channels. The hidden channels cannot be displayed except in this function. Use this function to skip unwanted channels.

Select a channel and reveal / hide



① select
② [reveal] / [hide]
☑ : [reveal]
☐ : [hide] (skip)

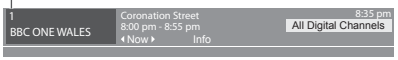
- To reveal all channels Y
- To retune each channel (Manual Tuning) R (p. 43)

■ **To edit the channel position**

You can also edit each channel in the Channel List.

1 Select a channel to edit

Channel position

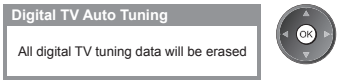


2 Swap the channel position

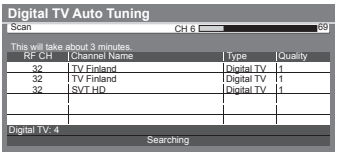
G ➡ Enter the new position number or ➡ Store G

[Auto Tuning] - Set all Digital TV channels automatically

1 Start Auto Tuning



2 Settings are made automatically

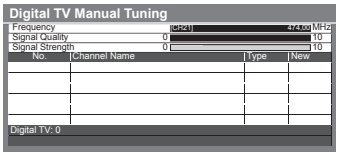


Automatically retune all Digital TV channels received in the area.

- All the previous tuning settings are erased.
- When the operation is completed, the channel at channel position [1] will be displayed.
- Search begins in the order from the lower channels to the higher channels.
- If tuning has not been done completely ➡ **[Manual Tuning] (see below)**

[Manual Tuning] - Set Digital TV channel manually

Normally use [Auto Tuning] or [Update Channel List] to update Digital TV channels on your channel list. If tuning has not been done completely or for adjusting the direction of the aerial, use this function.

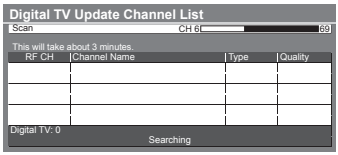


① select physical channel
② select offset
③ start tuning

- All channels found will be added to the Digital TV Channel List.

[Update Channel List] - Update channels automatically

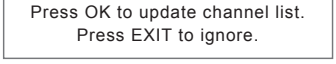
You can add new channels, delete duplicated channels, update channel name and position automatically to Channel List.



- Channel List is updated while keeping your settings in [Favourites Edit], [Channel List], [Child Lock], etc.
- Depending on the signal condition, the update may not work properly.

[New Channel Message] - Display a notification message

Selects whether to give a notification message when a new Digital TV channel is found. **[Off] / [On]**

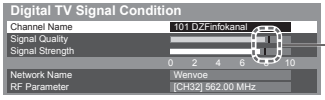


- Selecting OK will perform [Update Channel List].
- Sometimes, mainly during summer months at night, the TV may pickup distant TV stations outside your broadcast due to favourable short term ionosphere conditions. In such circumstances when you press OK button, the TV does not add any new channels. This is normal.

[Signal Condition] - Check Digital TV signal

Selects a channel and checks the Digital TV signal condition.

- To change the channel



These bars show the maximum signal value of the selected channel.

A good Signal Strength is not an indication of suitable signal for Digital TV reception. Please use the Signal Quality indicator as follows:

[Signal Quality]:

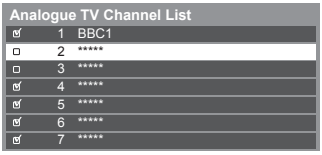
- Green bar ➡ Good
- Yellow bar ➡ Poor
- Red bar ➡ Bad (Check the aerial)

Analogue TV Tuning Menu

[Channel List] - Skip unwanted channels / Edit Channels (Change name, Move)

You can hide unwanted channels. The hidden channels cannot be displayed except in this function. Use this function to skip unwanted channels.

Select a channel and reveal / hide



☑: [reveal]
☐: [hide] (skip)

- To reveal all channels Y
- To retune each channel (Manual Tuning) R (see below)

■ To edit channels

You can also edit each channel in the Channel List.
Select a channel to edit and:

Channel position
Channel name

- To move the channel position

G ➡ Select the new position ➡ Store G

- To rename the channel name

B ➡

Set characters ➡ Store RETURN

- You can set characters by using numeric buttons (p. 32).

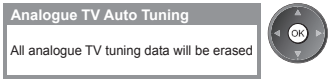
(maximum: five characters)

Note

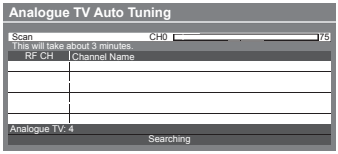
- If a VCR is connected only with the RF cable, edit [VCR].

[Auto Tuning] - Set all Analogue TV channels automatically

1 Start Auto Tuning



2 Settings are made automatically



Automatically retune all Analogue TV channels received in the area.

- All the previous tuning settings are erased.
- When the operation is completed, the channel at channel position [1] will be displayed.
- Search begins in the order from the lower channels to the higher channels.
- If tuning has not been done completely ➡ **[Manual Tuning] (see below)**

[Manual Tuning] - Set Analogue TV channel manually

Set Analogue TV channel manually after Auto Tuning.

- If a VCR is connected only with the RF cable, select channel position [0].

1 Select a channel position

2 Select a channel

3 Search

4 Select [Store]

Timer Programming

Timer Programming from Menu

The Timer Programming menu allows you to choose programmes that you wish to remind watching or record to the USB HDD / SD Card. At the correct time, the TV will tune to the correct channel even if the TV is in Standby mode.
TV Guide may also be used to set timer programming event (p. 22).

- This function is not available in Analogue mode.
- Timer Programming can store up to 15 events.
- Timer Programming only works reliably if correct time information is received via the signal from the broadcaster or service provider.
- For recording using Timer Programming, the TV must be either On or in standby. For reminders to be displayed, the TV must be On.
- No other channel can be selected while the recording of Timer Programming is in progress.
- It may not be possible to record an encrypted programme (which is copy-protected).
- When recording programmes to the USB HDD, be sure to format the USB HDD and enable it for recording in [Recording Setup] (p. 52).
- When recording programmes to the SD Card, prepare the SD Card without any data.
- 2 minutes before the starting time, a reminder message appears if you are watching TV.

• To remove the message and start the programming

• To cancel the programming

EXIT

Preparations:

1 Select Digital TV mode

TV

2 Display the menu

MENU

3 Select [Timer]

Select [Timer Programming]

Timer Programming	Access
Off Timer	Off
Auto Standby	Off

① select

② access

■ **To return to TV**

EXIT

■ **To unlock the tuner and stop recording**

[Timer Programming] - Set timer programming event details

1 **Start making the settings**

2 **Select the function ([USB HDD Rec.], [SD Card Rec.] or [Reminder])**

[USB HDD Rec.] / [SD Card Rec.]:

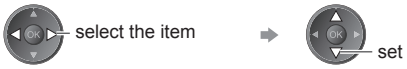
to record the programme to the USB HDD / SD Card
When the start time comes, the channel will be switched automatically and the video and audio signals will be output. 2 minutes before the starting time, a reminder message appears if you are watching TV.

[Reminder]:

to remind you to watch the programme
When you are watching TV, a reminder message appears 2 minutes before the start time.
Press the OK button to switch to the programmed channel.

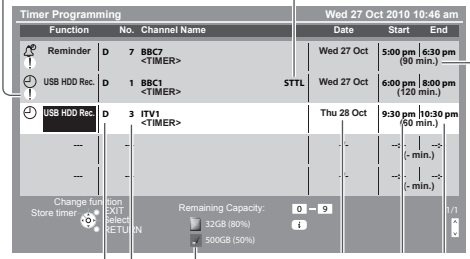
3 **Set the channel, date and time (repeat the operations as below)**

Set items in the order of **1** to **4**.



- **1**, **3** and **4** can also be entered with numeric buttons.

! : Displayed if the timer programming events are overlapped



Records with subtitles (if available)

- To indicate this

(Press again to remove subtitles)

Duration (automatic display)

Information of the USB HDD / SD Card (if available)

[D] : Digital TV

1 Channel number
2 Date
3 Starting time
4 Ending time

- [Daily Sun-Sat] : Sunday to Saturday
- [Daily Mon-Sat] : Monday to Saturday
- [Daily Mon-Fri] : Monday to Friday
- [Weekly Sat/Fri/Thu/Wed/Tue/Mon/Sun] : Same time on the same day every week

4 **Store**

■ To change a timer programming event

Select the programme to be changed

➡ Correct as necessary (p. 45)

■ To cancel a timer programming event

Select the programme to be deleted

■ To record with subtitles (if available)

Select the programme to record with subtitles

- Each time pressed : auto ◄► off

■ To cancel a timer programming event temporarily

Select the programme to be cancelled

- Each time pressed : cancel ◄► stop cancelling

Note

- Check that the LED is orange. If not, timer programmes are not active or not stored.
- Timer Programming reminder messages will remain displayed until one of the following occurs :
  - You press the OK button to view the programme or the EXIT button to cancel the reminder.
  - The timer programming event that the reminder is set for ends.
- "!" identifies that any timer programming events have overlapped. [USB HDD Rec.] / [SD Card Rec.] are given priority over [Reminder]. As for the overlapped two or more [USB HDD Rec.] / [SD Card Rec.], the first timer programming event starts and finishes as programmed. The next timer programming event can then start.
- The recording of Timer Programming will automatically change to the programmed channel 10 seconds before the start time.
- To stop recording the timer programming event directly prior to the start time, it may be necessary to stop the recorder manually.
- The recording of Timer Programming will be performed even if the TV is in REW LIVE TV recording (p. 56) or Pause Live TV recording (p. 81). In this case, these recordings will be cancelled.
- When [Daily Sun-Sat], [Daily Mon-Sat], [Daily Mon-Fri] or [Weekly Sat/Fri/Thu/Wed/Tue/Mon/Sun] is selected
  - The start and end time of the programme also changes according to start or end Daylight Saving Time. Then, the setting times may differ from the actual time. Confirm and modified the settings.

Child Lock

You can lock specific channels / AV input terminals and control who watches them.
When the locked channel / input is selected, a message appears; by entering the PIN number, you can watch it.

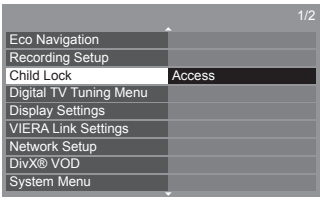
Preparations:

1 Display the menu

MENU

2 Select [Setup]

1 Select [Child Lock]

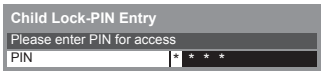


■ **To return to TV**

EXIT

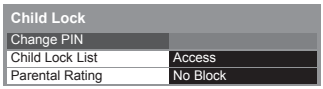
[Child Lock] - Control channel audience

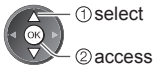
1 Enter the PIN number (4 digits)



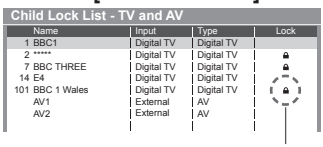
- "0000" has been stored as the default PIN number.

2 Select [Child Lock List] or [Parental Rating]





■ **To set [Child Lock List]**

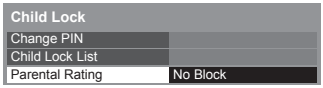


: Appears when the channel / input is locked

- To cancel ➡ **Select the locked channel / input**

- To lock all G
- To cancel all locks Y
- To jump to the top of the next input B

■ **To set [Parental Rating]**



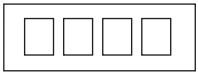
- Rating ➡ **(p. 87)**

■ **To change the PIN number**

1. Select [Change PIN] in [Child Lock]

2. Enter a new PIN number twice.

- Make a note of the PIN number in case you forget it.



Note

- Performing [Shipping Condition] (p. 50) erases the PIN number and all settings.
- If you have forgotten your changed PIN, input "6969" as the PIN number.
- Keep these Operating Instructions out of reach of children.

Input Labels

For easier identification and selection of the input mode, you can label each input mode or skip terminals that are not connected to any equipment.

- To select the input mode ➡ **(p. 23)**

Preparations:

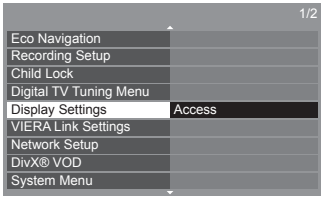
1 Display the menu

MENU

2 Select [Setup]

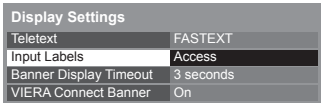
OK

1 Select [Display Settings]



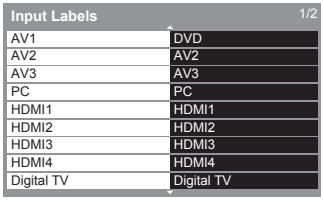
OK ①select ②access

2 Select [Input Labels]



OK ①select ②access

3 Select an input terminal and set



OK ①select ②access / store

The labels you set will be displayed in [Input Selection] menu (p. 23) or banner.

- If [Skip] is selected, you cannot select the mode.

■ To return to TV

EXIT

■ User input

You can name each input mode freely.

1 Select [User input]

OK ①select ②access

2 Set characters one by one

OK ①select ②set

(maximum: ten characters)

- You can set characters by using numeric buttons. ➡ **(p. 32)**

3 Store

RETURN

Shipping Condition (Reset settings)

Resets the TV to its original condition, i.e. no channels tuned in.
All settings other than USB HDD Registration, are reset (channels, picture, sound settings, etc.).

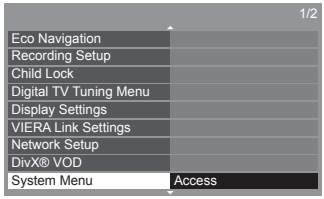
Preparations:

1 Display the menu

MENU

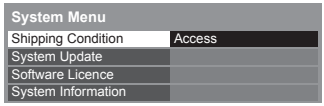
2 Select [Setup]

1 **Select [System Menu]**



① select
② access

2 **Select [Shipping Condition]**



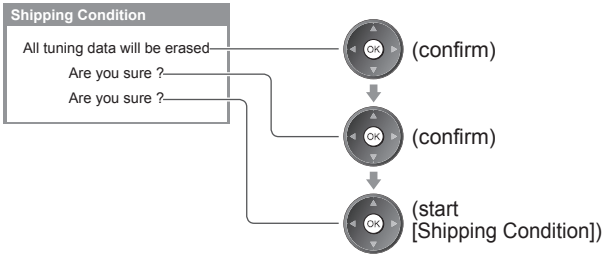
① select
② access

■ **To return to TV**

EXIT

[Shipping Condition] - Restore Settings

1 **Check the message and reset**



2 **Follow the on screen instructions**

Reset to Factory Shipping Condition
Completed.
Please switch off TV.

- [Auto Tuning] will automatically start when Mains power On/Off switch is next turned on (p. 13).

■ **To retune TV channels only, e.g. after moving house**

➡ **[Auto Tuning] in "Tuning and Editing Channels" (p. 43, 44)**

Updating the TV Software

From time to time, a new version of software may become available for download to enhance the performance or operations of the TV.
If there is an update available, a notification banner is displayed when the channel has the update information.

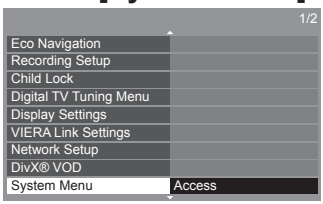
- To download (OK)
- If you choose not to download (EXIT)

You can update any new software automatically or update manually.

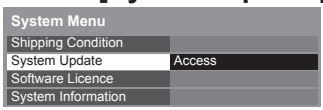
■ **To return to TV**
EXIT

Preparations:
1 Select Digital TV mode (TV) **2** Display the menu (MENU) **3** Select [Setup] (OK)

1 Select [System Menu]



2 Select [System Update]



[System Update] - Update TV's software system

■ **To update automatically**
Select [Auto Update Search in Standby] and set the timing

- Every time you set, the TV automatically performs a search in standby and downloads an update, if any software updates are available.
- The automatic updating is performed under the following conditions:
  - Standby (TV turned Off with the remote control)
  - Recording of Timer Programming, Direct TV Recording or One Touch Recording is not in progress.

If System Update is performed, the software will be updated (it may change TV functions). If you do not wish to do so, set [Auto Update Search in Standby] to [Off].

■ **To search for new software version**
1 Select [System Update Search Now]

2 Searches for an update (for several minutes) and displays a corresponding message if any

Note

- Download may take about 60 minutes.
- During software download and update, DO NOT switch Off the TV or press any buttons. The TV will automatically be activated after downloading is completed.
- During downloading, the TV will display a blank screen for 40 to 50 seconds. Do not interrupt the TV during this procedure.
- The message might be the notification beforehand. In this case, the schedule information (the date that the new version can be used) will appear. You can set the reservation for update. The update will not start when the TV is set to Off.
- Software updates may be distributed in several ways; Automatic Update via the TV antenna, the Internet via the TV's LAN port or downloaded by you from the Internet using your PC, copying the software image to your SD card or USB stick then updating TV software using the TVs USB port or TV SD card slot. No other distribution method is available.

USB HDD / SD Card Recording

You can record the digital TV programmes to the connected USB HDD or inserted SD Card and enjoy playing back in various ways.

- Analogue TV programme cannot be recorded to the USB HDD / SD Card.
- The data broadcasting (MHEG, etc.), radio broadcasting and the periods without any signal will not be recorded.
- Not all the programmes can be recorded depending on the broadcaster and service provider.
- For more information of the SD Card, USB HDD (p. 90)
- If the remaining capacity of the USB HDD / SD Card is run out, the recording cannot be done.

Caution

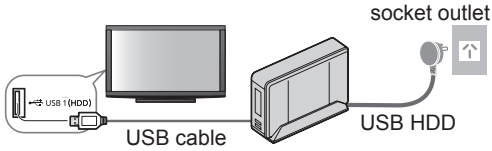
- All data in the USB HDD / SD Card will be erased in the following cases :
  - When formatting the USB HDD / SD Card with the TV "Setting for USB HDD" (below) / "SD Card Format (if necessary)" (p. 54)
  - When formatting the USB HDD / SD Card to use on PC
- When the TV is repaired due to a malfunction, you may have to format the USB HDD again with the TV to use it. (All data will be erased when formatting.)
- In order to use the USB HDD with your PC after recording with this TV, format it again on your PC. (Special operations or tools may be necessary to format on your PC. For details, refer to the manual of the USB HDD.)
- The data recorded to the USB HDD / SD Card with this TV can only be played back on this TV. You cannot play back its contents with another TV (including the TV of the same model number) or any PCs.

Connecting and Setting for USB HDD

You cannot change the settings for the USB while recording is in progress.

Preparations:

1 Connect the USB HDD to the USB 1 port.



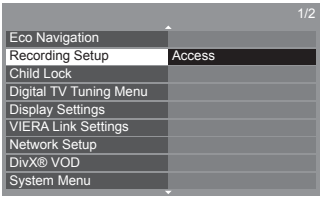
- Be sure to connect the USB HDD to the socket outlet.
- Do not turn off or disconnect the USB HDD during operation. It may cause malfunction of the drive or damage the recorded data.
- To remove the USB HDD safely from the TV ➡ **(p. 20, 53)**

2 Turn on the USB HDD.

3 Display the menu MENU

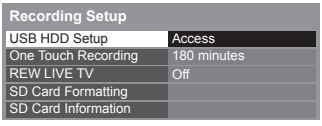
4 Select [Setup] OK

1 Select [Recording Setup]



2 Select [USB HDD Setup] and set

(see next page)



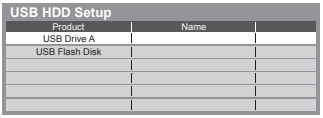
■ **To return to TV** ➡ EXIT

■ **To return to the previous screen** ➡ RETURN

[USB HDD Setup] - Setup the USB HDD

All the USB devices recognized as a mass storage device will be listed.

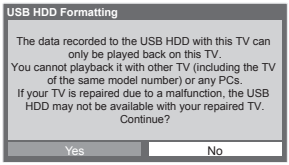
1 Select the USB HDD for recording and start setup



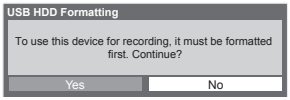
①select
②access

- For the information of the highlighted device ➡ INFO

2 Caution and confirmation of USB HDD recording and playing back


USB HDD Formatting
The data recorded to the USB HDD with this TV can only be played back on this TV.
You cannot playback it with other TV (including the TV of the same model number) or any PCs.
If your TV is repaired due to a malfunction, the USB HDD may not be available with your repaired TV.
Continue?
Yes
No

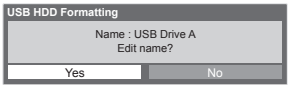
①select [Yes]
②set



①select [Yes]
②set

①select [Yes]
②set

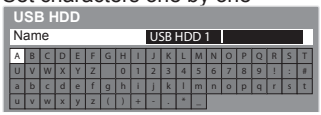
3 Confirmation of USB HDD name



①select
②set

The name for the USB HDD is created automatically. If you want to edit the name, select [Yes].

Set characters one by one



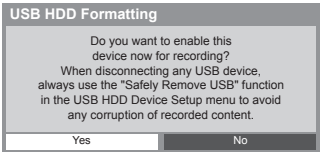
①select
②set

Store ➡ RETURN

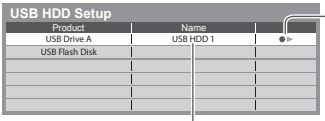
- You can set characters by using numeric buttons.

4 Confirmation to enable USB HDD for recording

If the formatted USB HDD for recording already exists, this confirmation screen will be displayed to switch to enable this USB HDD for recording.


USB HDD Formatting
Do you want to enable this device now for recording?
When disconnecting any USB device, always use the "Safely Remove USB" function in the USB HDD Device Setup menu to avoid any corruption of recorded content.
Yes
No

①select [Yes]
②set



Mode
●▶: The USB HDD is available for recording / playing back.
Only one USB HDD on the list can be available for recording.
▶: The USB HDD is available for playing back.

USB HDD name is displayed

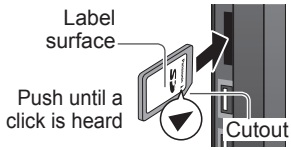
- To remove the USB HDD safely from the TV — Y
- To format — R
- To edit USB HDD name — G

- To set [Safely Remove USB] in other conditions ➡ (p. 20)

Preparing for SD Card

You cannot change the settings for the SD Card while recording is in progress.
Prepare the SD Card without any data.

Insert the SD Card to SD Card Slot



- When the SD Card is inserted, switching to Media Player will be done automatically.

SD Card Format (if necessary)

While formatting, do not turn off main power switch or remove the SD Card.

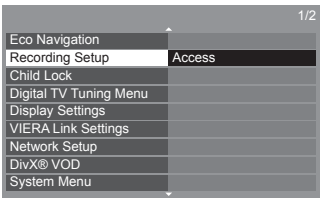
Preparations:

1 Display the menu

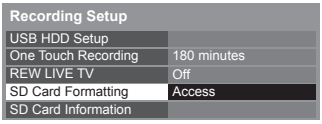
MENU

2 Select [Setup]

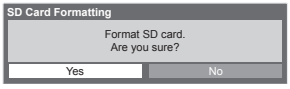
1 **Select [Recording Setup]**

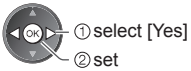


2 **Select [SD Card Formatting] and set**

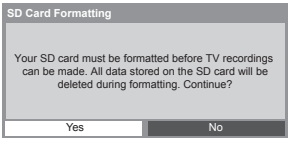


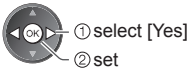
3 **Confirmation of SD Card**





4 **Caution of SD Card recording and playing back**


SD Card Formatting
Your SD card must be formatted before TV recordings can be made. All data stored on the SD card will be deleted during formatting. Continue?
Yes
No



Format starts

■ **To return to TV** ➡ EXIT

■ **To return to the previous screen** ➡ RETURN

Note

- If format was failed,
  - Ensure the SD Card is inserted to the SD Card slot
  - Ensure the SD Card is not write-protected
  - Ensure card type, that is compliant

Recording the TV programme to USB HDD / SD Card

You can record the current programme immediately by using [One Touch Recording].
You can also record the current programme constantly for the selected period by using [REW LIVE TV] so that you can go back or pause the current programme.

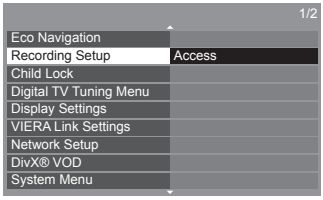
- Ensure the connection and setup for USB HDD are completed or SD Card is inserted before start recording ➡ **(p. 52 - 54)**
- Ensure not to connect or disconnect any USB devices or not to insert or remove SD Card during USB HDD / SD Card recording. Otherwise the recording may not work properly.

Preparations:

1 Display the menu
MENU

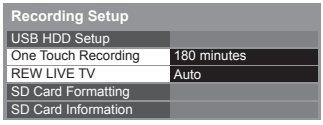
2 Select [Setup]
OK ①select ②access

1 Select [Recording Setup]



OK ①select ②access

2 Select [One Touch Recording] or [REW LIVE TV]



OK select

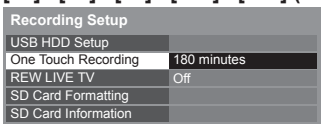
3 Set

■ **To return to TV** EXIT

[One Touch Recording] - What you see is What you record

Recording the current programme in the USB HDD immediately.

Select the maximum recording time
[30] / [60] / [90] / [120] / [180] (minutes)



OK ①change ②access / store

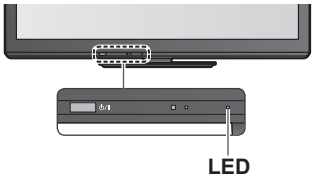
■ **To start One Touch Recording**

- Set the remote control code to "73" ➡ **(p. 24)**

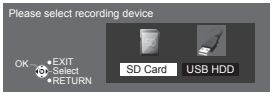
Start
REC

- No other channel can be selected while the recording is in progress.

LED will turn to orange (flash) while One Touch Recording is in progress.



■ **When more than 2 recording device are available, select recording device.**



OK ①select ②set

■ **To stop recording on the way**

■ **To playback or delete the recorded contents**

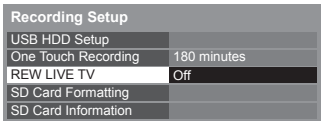
➡ **"Using Media Player" (p. 57)**

- Even if One Touch Recording is in progress, you can playback all the contents. However, the recording may not work properly while playback.

[REW LIVE TV] - Record constantly

Recording the current programme constantly.

Select [Auto] to start REW LIVE TV



- When you select [Auto], the recording will start automatically.

■ **To operate the REW LIVE TV**

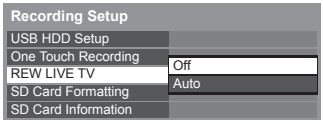
- Set the remote control code to "73" ➡ **(p. 24)**
- To pause

- To search backward

(press and hold)

- After pausing or searching backward, the following buttons are available to operate.

■ **To stop the REW LIVE TV**



- If you stop the REW LIVE TV, the recorded content for the REW LIVE TV will be deleted.

- REW LIVE TV will be stopped and the recorded content deleted automatically in the following conditions:
  (Even if REW LIVE TV stops for the following conditions, as long as the setting is [Auto], the new recording will start automatically in a condition that makes the recording available.)
  - selected other channels
  - selected locked channel
  - selected invalid channel
  - no TV signal
  - when the other recording starts
  - when the TV is turned off or standby

Using Media Player

Media Player allows you to enjoy photo, video or music recorded on an SD Card and a USB Flash Memory and recorded contents on the registered USB HDD.
VIERA IMAGE VIEWER is the function of the easy viewing for photos or videos recorded on an SD Card on the TV screen by simply inserting into the SD Card slot.

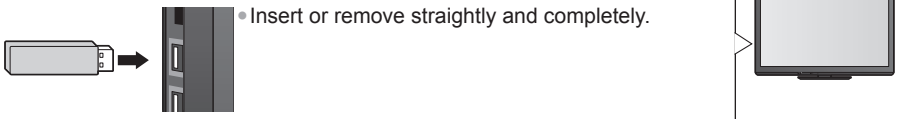
Photo mode: Still pictures recorded by digital cameras will be displayed.
Video mode: Moving pictures recorded by digital video cameras will be played back.
Recorded TV mode: Recorded TV Programmes with One Touch Recording will be Playback.
Music mode: Digital music data will be played back.

When these functions are used, the audio signal is output from audio output terminals.

- [Date] shows the date on which the recording was made by the recording equipment. The file without record of the date is shown "**/**/****".
- The picture may not appear correctly on this TV depending on the recording equipment used.
- Display may take some time when there are many files and folders.
- Partly degraded files might be displayed at a reduced resolution.
- Picture setting may not work depending on the conditions.
- The folder and file names may be different depending on the digital camera or digital video camera used.

To insert or remove the SD Card / USB Flash Memory

■ **USB Flash Memory**

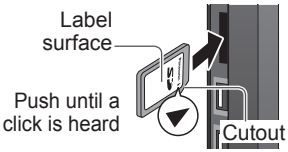


- Insert or remove straightly and completely.

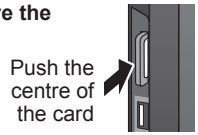
■ **SD Card**

To insert the SD Card

Gently insert the SD Card label surface facing front.



To remove the SD Card



- For more information of the SD Card, USB Flash Memory and supported file format ➡ **(p. 90 - 92)**

1 Insert the SD Card or USB Flash Memory

➡ (p. 57)

When the SD Card is inserted, switching to Media Player will be done automatically.

2 Switch to Media Player

3 Select the icon you want to access

selected device name

- If only one device is connected, this step will be skipped.

4 Select the content

[Photo]
➡ **"Photo mode" (p. 59)**
[Video]
➡ **"Video mode" (p. 63)**
[Music]
➡ **"Music mode" (p. 68)**
[Recorded TV]
➡ **"Recorded TV mode" (p. 65)**

- You can also access each mode directly by using VIERA TOOLS.
  ➡ **"How to Use VIERA TOOLS" (p. 31)**

■ To return to TV

EXIT or SD CARD

■ To return to the previous screen

RETURN

Change the device

You can change to the other device directly in the same mode if two or more devices are connected.

1 Display the menu

Y

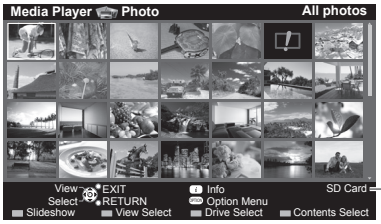
2 Select the icon you want to access

selected device name

Photo mode

Supported file format ➡ **(p. 91)**

The thumbnail of all the photos in the SD Card or USB Flash Memory will be displayed.
Example : Thumbnail - [All photos]

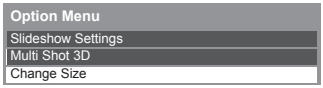


: Error display

Selected Device Name

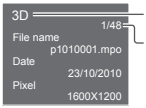
- To change the number of photos on a thumbnail screen at a time (7 × 4 ↔ 10 × 6)

OPTION ➡



- To change the background music ➡ **"Photo Setup" (p. 60)**
- To display the information of the highlighted photo

INFO



displayed for MPF (3D) file
File number / Total file number

■ To sort by folder, recorded date or recorded month

1 Display the view selection

G

2 Select the sort type

Folder view
Sort by Date
Sort by Month

[Folder view]:
Displays the thumbnail grouped by folder
- The files which are not into a folder will be collected to the folder named "/".

[Sort by Date]:
Displays the thumbnail grouped by the same date
- The group of the photos without a recorded date is shown as [Unknown].

[Sort by Month]:
Displays the thumbnail grouped by the same month
- The group of the photos without a recorded date is shown as [Unknown].

3 Select one of the sorted groups to display the thumbnail of the selected group

- To return to the thumbnail of all photos

G ➡

- To display the information of the highlighted group

INFO

Group number / Total group number
Folder name, date or month

[Single view] - Photos are displayed one at a time.
Select the file from the thumbnail of photos to be viewed

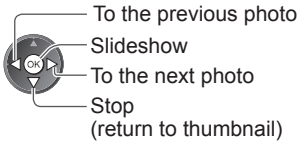
Example :

Operation guide

- To display / hide the operation guide

- To return to thumbnail

- To operate Single view



- To rotate 90°

[Slideshow] - Slideshow will complete when all photos have been viewed within the present thumbnail.

1 Select the file from the thumbnail of photos for the first view

2 Start Slideshow

- To display / hide the operation guide

- To pause (return to Single view)

- To return to thumbnail

Photo Setup

Setup the settings for Photo mode.

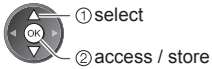
1 Display the option menu

2 Select [Slideshow Settings] or [Multi Shot 3D]

Option Menu
Slideshow Settings
Multi Shot 3D
Change Size

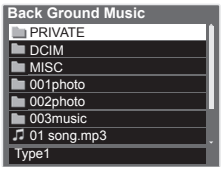
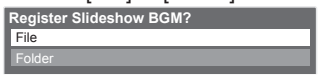
3 Select the items and set

Slideshow Settings	
Frame	Off
Colour Effect	Off
Transition Effect	Fade
Screen Mode	Normal
Burst Playback	Off
Interval	5 seconds
Repeat	On
Back Ground Music	



Note

- Picture quality may become lower depending on the slideshow settings.
- Picture setting may not work depending on the slideshow settings.

Item	Adjustments / Configurations (alternatives)
Frame	Selects the indication frame of the slideshow **[Off] / [Multi] / [Collage] / [Drift (+ calendar)] / [Drift] / [Gallery (+ calendar)] / [Gallery] / [Cinema]** **[Multi]:** 9 division display like tiled design **[Collage]:** A photo is displayed at a random position and at a random scale. **[Drift (+ calendar) / Drift]:** Photos are displayed like flow images. • You can select to display the calendar or not. To change the month of the calendar, press the left or right cursor button while viewing the slideshow. **[Gallery (+ calendar) / Gallery]:** The various sizes of photos in the frame are displayed. • You can select to display the calendar or not. To change the month of the calendar, press the left or right cursor button while viewing the slideshow. **[Cinema]:** Photos are displayed like old films (sepia tone)
Colour Effect	Selects the colour effect of photos on Single view and Slideshow **[Off] / [Sepia] / [Gray scale]** • This function is not available when [Frame] is set to [Drift], [Gallery] or [Cinema].
Transition Effect	Selects the transition effect for switching the photo during the slideshow **[Off] / [Fade] / [Slide] / [Dissolve] / [Motion] / [Random]** **[Fade]:** The next photo fades in gradually. **[Slide]:** The next photo slides and appears from the left side. **[Dissolve]:** The photo is replaced by an indefinite block unit. **[Motion]:** The photo is replaced with enlarged, reduced, moved up or moved down. **[Random]:** Each transition is selected at random. • This function is available when [Frame] is set to [Off].
Screen Mode	Selects enlarged or normal viewing on Single view and Slideshow **[Normal] / [Zoom]** • This function is not available when [Frame] is set to [Collage], [Drift], [Gallery] or [Cinema]. • This function is not available when [Transition Effect] is set to [Motion]. • Depending on the photo size, the photo may not be enlarged.
Burst Playback	Selects whether the continuous shots are displayed in rapid interval during the slideshow **[Off] / [On]** • This function is not available when [Frame] is set to [Drift], [Gallery] or [Cinema]. • This function is not available when [Transition Effect] is set to [Motion].
Interval	Selects slideshow interval **[5] / [10] / [15] / [30] / [60] / [90] / [120] (seconds)** • This function is not available when [Transition Effect] is set to [Motion].
Repeat	Slideshow repeat **[Off] / [On]**
Back Ground Music	Selects the background music during Photo mode **[Off] / [Type1] / [Type2] / [Type3] / [User] / [Auto]** • [Type1], [Type2] and [Type3] are the fixed music each installed in this TV. **[User]:** Music data in the current device registered by yourself will be played back. **To register the music** 1 Select the music file Depending on the conditions of the current device, select folders until you reach the desired music file.  2 Select [File] or [Folder]  [File]: The selected music file will be registered as background music. [Folder]: All the music in the folder which contains the selected music file will be registered as background music. • If no music has been registered or the registered music device is removed, no sound will be produced. **[Auto]:** Music data stored in the root folder of the current device will be played back randomly. • If there is no available music data, no sound will be produced.

Multi Shot 3D

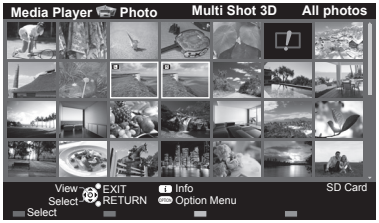
This TV can create the 3D photo using a pair of photos in the SD Card and save it into the same SD Card.

- This TV can also create the 3D photo from photos in the USB Flash Memory, but cannot save it.
- This function is available with photos recorded by digital cameras.
- Depending on the photos you select, the created 3D photo may not be suitable or the 3D photo creation may not be possible.
- It is recommended to take a photo (for L) and then move your camera to the right about 5 cm and take another photo (for R).
- To view the created 3D photo with 3D effect, you need the 3D Eyewear
  ➡ **"Optional accessories" (p. 9)**

1 Display the option menu in the thumbnail view

2 Select [Multi Shot 3D]

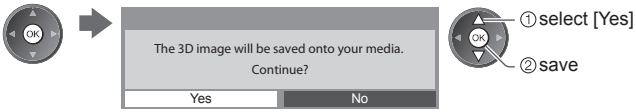
3 Select two photos for L (left) and R (right)



- You can only select photos of the same recorded date and same pixels.
- You may not be able to view the created 3D photo properly if you select the photos for L and R oppositely.

4 Create the 3D photo

- If your selected photos are not suitable for the 3D photo, the error message will be displayed and will return to the photo selection screen.
- To save the 3D photo in the SD Card



After finishing saving the photo, the photo selection screen will be displayed (step 3). Select photos again to create another 3D photo or exit from [Multi Shot 3D] mode.

■ To enjoy the saved 3D photos

You can enjoy viewing the saved 3D photos.

(Thumbnail)

Saved 3D photo

- Single view ➡ **(p. 60)**
- Slideshow ➡ **(p. 60)**

Change the contents

You can switch to the other mode of Media Player from the thumbnail view.

1 While the thumbnail is displayed, display the contents selection

B

2 Select the contents

[Photo] ➡ **“Photo mode” (p. 59)**
[Video] ➡ **“Video mode” (below)**
[Music] ➡ **“Music mode” (p. 68)**
[Recorded TV]
➡ **“Recorded TV mode” (p. 65)**

Video and Recorded TV mode

Supported file format ➡ **(p. 91)**

Video mode

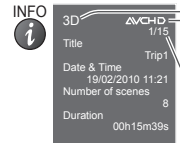
(For the USB HDD / USB Flash Memory / SD Card)

The thumbnail of video titles in the SD Card or USB Flash Memory will be displayed.

Example : Thumbnail - [Title view]

The preview will start when the title is highlighted if it supports a preview.

- To turn off the preview ➡ **“Video Setup” (p. 64)**
- To display the information of the highlighted title



: Error display
: The file does not support thumbnail view.

- To view the scenes of the title

Select the title

Example : Thumbnail - [Scene view]

The preview will start when the scene is highlighted if it supports a preview.

- To turn off the preview ➡ **“Video Setup” (p. 64)**
- To display the information of the highlighted scene

■ Playback from Title view

Playback of the selected title will start.

- To repeat playback ➡ **“Video Setup” (p. 64)**

1 Select the title

2 Start playback

R

■ Playback from the selected scene in the title

Playback will start from the selected scene to the end of the title.

- To repeat playback ➡ **“Video Setup” (p. 64)**

1 Select the title

2 Select the scene

3 Start playback

R

Note

- The structure of titles and scenes may vary depending on the digital video camera used.

■ **How to operate playback**

Example : Playback

Operation guide Information banner

- To display / hide the operation guide and information banner

INFO

- To operate playback

◀◀ Rewind
II/▶ Pause / Playback
▶▶ Fast forward
■ Stop

- To change aspect

ASPECT

- To the previous title / scene

R

- To the next title / scene

G

- To return to thumbnail

RETURN

- You can also use the following buttons. ➡ **(p. 24)**
  Set the remote control code to “73”

■ **To change the device ➡ “Change the device” (p. 58)**

■ **To change the content in the current device ➡ “Change the contents” (p. 63)**

Video Setup

Setup the settings for Video mode.

1 Display the option menu in the thumbnail view

OPTION

2 Select [Video Setup]

Option Menu
Video Setup

access

3 Select the items and set

Video Setup Menu	
Video Preview	On
Repeat	Off

①select
②access / store

Item	Adjustments / Configurations (alternatives)
Video Preview	Sets to start the preview of the title or scene in the thumbnail view **[Off] / [On]** • Image may not be displayed for an instant in the thumbnail view. Set the preview [Off] to resolve this.
Repeat	Playback repeat within the title or selected file (depending on the content) **[Off] / [On]**

Confirm or change the current status

You can confirm or change the current status of the content.

- Menu items and selectable options vary depending on the content.

1 Display the option menu during playback

OPTION

2 Select [Video Setup]

Option Menu
Video Setup

access

3 Select the items and set

Video Setup Menu	
Audio Selection	Stereo
Subtitle	Off
Subtitle text	Latin1
Aspect Change	Aspect1
Repeat	Off

①select
②access / store

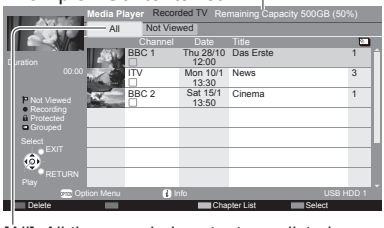
Item	Adjustments / Configurations (alternatives)
Audio Selection	Allows you to select between selectable sound tracks (if available) • It may take several seconds to change the sound.
Subtitle	Turn the subtitle on/off and select the subtitle file (if available) **[Off] / [Subtitle1] (/ [Subtitle2] ...)**
Subtitle text	Selects the font type, if the subtitles text is not displayed correctly. **[Latin1] / [Latin2] / [Cyrillic] / [Turkish] / [Unicode] / [Chinese1] / [Chinese2]** • Some subtitles text may not be displayed correctly.
Aspect Change	**[Aspect1]:** Displays the content square **[Aspect2]:** Displays the content full-screen **[Original]:** Displays the content original size • You can also change the aspect using the ASPECT button. • Aspect change may not work depending on the content.

Recorded TV mode

(For the USB HDD / SD Card)

Contents list of the USB HDD or SD Card will be displayed.

Example : Contents list



[All]: All the recorded contents are listed.
[Not Viewed]: Contents not played back are listed.

Remaining capacity of the HDD / SD Card

- This value may not be accurate depending on the condition.
- You can also access the contents list directly by using VIERA TOOLS.
  ➡ **"How to Use VIERA TOOLS" (p. 31)**
- To display the information of the highlighted content

INFO

- Channel
Digital TV, BBC 1
- Title
Das Erste
- Date & Time
Thu 27/10/2011 11:01 pm
- Duration
00:20

: Content not played back (Once you playback the content, this icon will disappear.)

● : Content under recording (You can playback this content even if under recording.)

: Protected content cannot be deleted.

: Two or more contents are grouped.

■ Playback the content from the list

1 Select the content

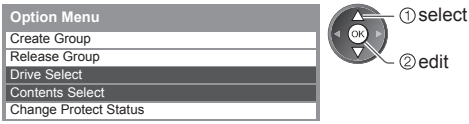
2 Start playback

■ To edit recording content (USB HDD only)

1 Select the content to edit

2 Display the option menu

3



[Create Group]:
Two or more contents can be grouped. Select and tick all the desired contents, and then select [Create Group].
[Release Group]:
Select the created group you want to release, and then select [Release Group]. (To release several groups at once, tick all the desired groups.)
[Exclude from Group]:
Select the group and press the OK button to display the grouped contents. To exclude only the specific content from the group, select it and then select [Exclude from Group]. (To exclude several contents at once, tick all the desired contents.)
[Change Protect Status]:
Select the content you want to protect to delete, and then select [Change Protect Status]. Perform the same way to cancel the protection. (To change the status of several contents at once, tick all the desired contents.)

■ **Delete the selected content**

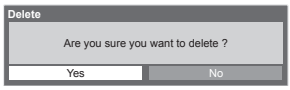
1 Select the content

select

2 Delete the content

R

3 Confirm



①select
②set

- To select two or more contents

B

■ **How to operate playback**

Example : Playback

Operation guide

Information banner

- To display / hide the operation guide and information banner

INFO

- To operate the playback

◀◀ Rewind

[Manual skip]
- Press to skip forward about 30 seconds
- Press and hold to skip backward about 15 seconds

II/▶ Pause / Playback

▶▶ Fast forward

■ Stop

- To repeat between the start point “A” and finish point “B”
  Set “A” and “B” in order

B

  • The points will be reset by pressing this button again or other operations.

- To the previous scene

R

- To the next scene

G

- To change aspect

ASPECT

- To display the subtitle (if available)

STTL

- To return to list

RETURN

- You can also use the following buttons. (p. 24)
  Set the remote control code to “73”

- To confirm or change the current status (if available)
  ➡ **“Display the selectable settings for the current programme” (p. 20)**

■ **Chapter List**

You can start playback from the chapter list you select.

- A recorded content is automatically divided into five-minute chapters.
- The chapter list is not displayed while the selected content is being recorded.

To play back from the chapter list

Y

Note

- Depending on the recorded programmes, some playback operations may not work properly.

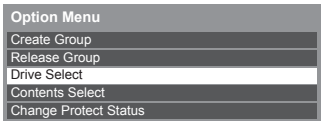
■ **Change the device**

You can change to the other device directly in the same mode if two or more devices are connected.

1 Display the option menu

OPTION

2 Select [Drive Select]

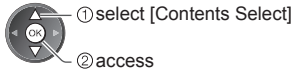


3 Select the device you want to access to

If you select the SD Card or USB Flash Memory, also change the contents to enjoy photo, video or music.

- To change the content

OPTION



Audio output Settings

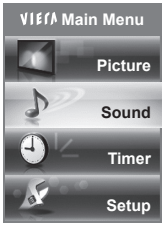
You can enjoy the multi-channel sound via an amplifier connected to the DIGITAL AUDIO OUT terminal.

- To confirm or change the current sound status ➡ **"Confirm or change the current status" (p. 64)**

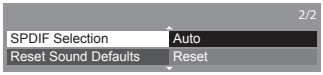
1 Display the menu

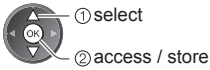
MENU

2 Select [Sound]



3 Select [SPDIF Selection] and set



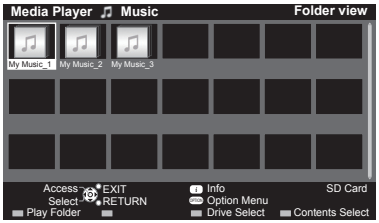


Item	Adjustments / Configurations (alternatives)
SPDIF Selection	SPDIF: A standard audio transfer file format Selects the initial setting for digital audio output signal from the DIGITAL AUDIO OUT and HDMI2 (ARC function) terminals **[Auto] / [PCM]** **[Auto]:** Dolby Digital Plus, Dolby Digital and HE-AAC (48 kHz) multi-channel are output as Dolby Digital Bitstream. DTS is output as DTS. MPEG is output as PCM. **[PCM]:** Digital output signal is fixed to PCM.

Music mode

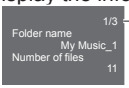
Supported file format ➡ **(p. 92)**

The thumbnail of music folders in the SD Card or USB Flash Memory will be displayed.
Example : Thumbnail - [Folder view]



- To display the information of the highlighted folder

INFO



Folder number / Total folder number

■ Playback from Folder view

All the files in the selected folder will be played back.

1 Select the folder

2 Start playback

R

■ Playback from File view

Selected file will be played back.

1 Select the folder

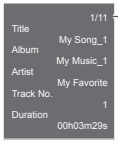
2 Select the file

select

3 Start playback

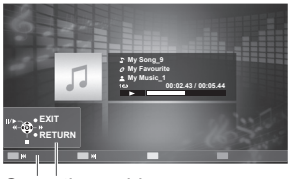
R

To display the information of the highlighted title INFO



File number / Total file number

■ How to operate playback



Operation guide

- To display / hide the operation guide INFO
- To operate playback

- To the previous track R
- To the next track G
- To return to thumbnail RETURN

Music Setup

Setup the setting for Music mode.

1 Display the option menu

OPTION

2 Select [Music Setup]

access

3 Set

①select
②access / store

[Folder]: Playback repeats within the selected folder
[One]: Playback repeats of the selected one file

Using Network Services

DLNA®

This TV is a DLNA Certified™ product.
DLNA (Digital Living Network Alliance) is a standard that makes DLNA Certified digital electronics easier and more convenient to use on a home network. To learn more, visit www.dlna.org.
It allows you to share photos, videos and music stored in a DLNA Certified media server (for example, PC with windows 7 installed (with suitable CODEC pack plug-in), DIGA Recorder etc.) connected to your home network, and enjoy them on the TV.

Supported file format ➡ **(p. 91 - 92)**

Media server
Ensure the connected equipment is a DLNA Certified media server.
To use a PC, install the server software on the PC for obtaining a media server.
Store photos, videos or music into the media server, and then you can watch them on the TV.
"TwonkyMedia server 6" and "Windows 7" are the server software that has been tested for the performance with this TV (current as of January, 2011).
For installing, read the manual of the server software.
- The DLNA control function of Windows 7 is not supported with this TV.
- When the server software for the media server is installed on the PC, the data may be at risk of being accessed by other people. Please take care of the settings and connections under the network circumstances at the office, hotel or even at home when not using a router.

By connecting a DLNA compatible DIGA Recorder to your home network, you can enjoy and control it as one of the media servers.
- For details, read the manual of the DIGA Recorder.

DLNA Remote Control
This TV supports the DLNA control function.
- To use this function, set the [Network Link Settings] (p. 71)
- "Windows 7" is the OS that has been tested for compatibility of this TV (current as of January, 2011). For the operations, refer to the help functions of Windows 7.

Network connection
➡ **"Example 1" or "Example 2" in "Network connections" (p. 70)**

Network setup
➡ **(p. 71 - 74)**

DLNA operations
➡ **(p. 75 - 78)**

VIERA Connect™

VIERA Connect is a gateway to the internet services unique to Panasonic and expands VIERA CAST functions greatly.
VIERA Connect allows you to access some specific websites supported by Panasonic, and enjoy internet contents such as photos, videos, games, etc. from VIERA Connect home screen.
- This TV has no full browser function and all features of websites may not be available.

Network connection
➡ **"Example 1" or "Example 3" in "Network connections" (p. 70)**

Network setup
➡ **(p. 71 - 74)**

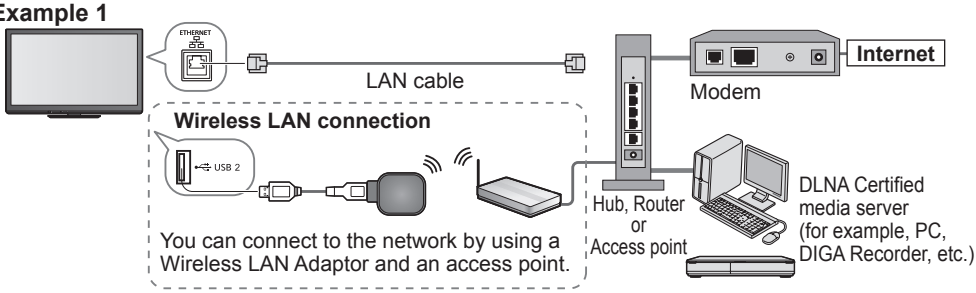
VIERA Connect operations
➡ **(p. 17, 78)**

Network connections

To use only DLNA features, you can operate the features without a Broadband network environment.
To use VIERA Connect features, you need a Broadband network environment.

- If you do not have any Broadband network services, please consult your retailer for assistance.
- Confirm the terms and conditions of the contracts with your Internet Service Provider (ISP) or telecommunications company.
- Set up and connect any equipment required for the network environment.
- Required speed (effective): at least 1.5 Mbps for SD and 6 Mbps for HD picture quality, respectively. If the transfer speed is not enough, contents may not be played back properly.
- Read the manual of the network equipment, too.

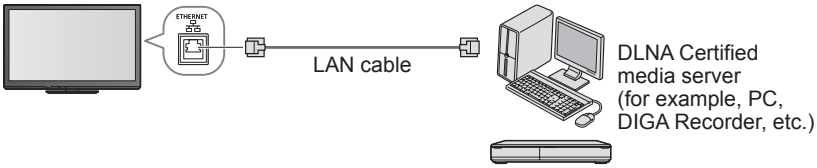
Example 1



- Ensure to use a LAN straight cable for this connection.
- If your modem has no broadband router functions, use a broadband router.
- If your modem has broadband router functions but there are no vacant ports, use a hub.
- Ensure that the Broadband routers and hubs are compatible with 10BASE-T / 100BASE-TX.
- If you use the equipment compatible only with 100BASE-TX, category 5 LAN cables are required.

Example 2

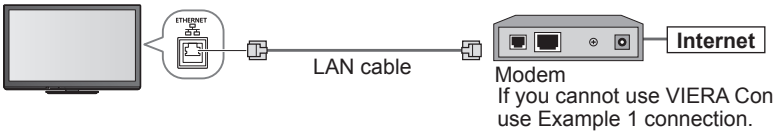
You can connect the TV and the equipment directly to use DLNA features.



- Ensure to use a LAN cross cable for this connection.

Example 3

You can connect the TV and the telecommunication equipment directly to use VIERA Connect features.



Note

- Depending on the ISP or telecommunications company, the required equipment and the Internet connection procedure are different. Ensure that you use network equipment that is authorised by your ISP and telecommunications company.
- You cannot make settings for the network equipment on this TV. You may be required to make settings on your computer.
- Depending on the terms and conditions of the contracts with your ISP or telecommunications company, additional fees may be charged or multiple connections to the Internet may be impossible.
- Please contact your ISP or telecommunications company if you require further assistance regarding the network equipment.

[Network Setup]

- Ensure the connections are completed before starting Network Setup.
  ➡ **"Network connections" (p. 70)**

■ To return to TV

EXIT

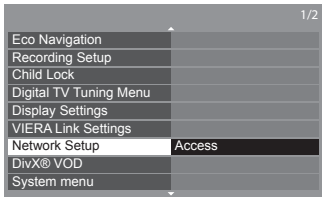
Preparations:

1 Display the menu

MENU

2 Select [Setup]

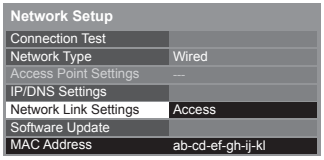
1 Select [Network Setup]



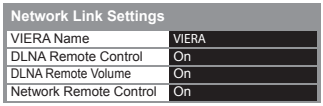
Network Link settings

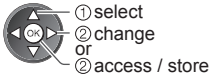
Sets the link settings to control this TV from the network equipment via the network.

1 Select [Network Link Settings]



2 Select the items and set





Item	Adjustments / Configurations (alternatives)
VIERA Name	Sets your favourite name for this TV and this name will be used to display the name of this TV on the screen of the other DLNA compatible equipment.
DLNA Remote Control	Enables to control the TV using Windows 7 via the network **[On] / [Off]**
DLNA Remote Volume	Enables to control the volume of the TV using Windows 7 via the network **[On] / [Off]**
Network Remote Control	Enables to control the TV from the network equipment (Smartphone, etc.) **[On] / [Off]** • Depending on the area, this function may not be available. For details, consult your local Panasonic dealer. • For more information of this function, visit the following website. (English only) http://panasonic.jp/support/global/cs/tv/

Network settings for the LAN Cable connection

This setting is for the network connection by using the LAN cable.

1 **Select [Network Type] and set to [Wired]**

Network Setup	
Connection Test	
Network Type	Wired
Access Point Settings	---
IP/DNS Settings	
Network Link Settings	
Software Update	
MAC Address	12-34-56-78-9a-bc

①select

②access / store

If you make the network connection like [Example2] (p. 70), you do not have to set [DNS Address], [Proxy] and [Proxy Port].

2 **Select [IP/DNS Settings] and set the items**

Network Setup	
Connection Test	
Network Type	Wired
Access Point Settings	---
IP/DNS Settings	Access
Network Link Settings	
Software Update	
MAC Address	12-34-56-78-9a-bc

①select

②access

After settings, return to [Network Setup] screen

■ **[Acquire IP Address]**

■ **[Acquire DNS Address]**

Sets [IP Address], [Subnet Mask], [Gateway] and [DNS Address].
For most users, the recommended method of connection to your network is by using [Auto] feature.

Select [Acquire IP Address] and then set to [Auto]
Select [Acquire DNS Address] and then set to [Auto]

IP/DNS Settings	
Acquire IP Address	Auto
IP Address	192.168.11.5
Subnet Mask	255.255.255.0
Gateway	192.168.11.1
Acquire DNS Address	Auto
DNS Address	192.168.11.1
Proxy Settings	

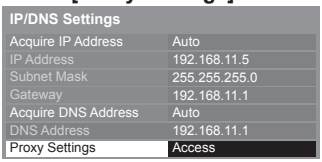
①select

②access / store

- The available settings are displayed automatically.

2 ■ **[Proxy Settings]**

Select [Proxy Settings] and set the items



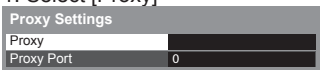
After settings, return to [Network Setup] screen

[Proxy]

Sets Proxy address.

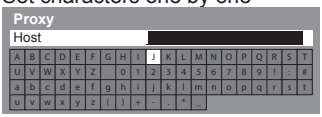
- This is the address of the relay server that is connected to the target server instead of the browser and sends data to the browser. Setting is required if specified by the provider.

1. Select [Proxy]



2. Enter the address

Set characters one by one



- You can set characters by using numeric buttons.

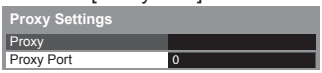
3. Store

[Proxy Port]

Sets Proxy port number.

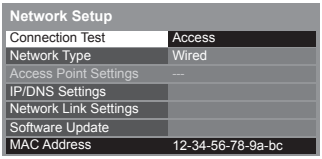
- This number is also specified by the provider with the Proxy address.

1. Select [Proxy Port]

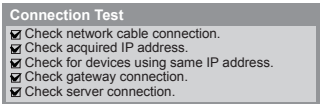


2. Move the cursor and enter the number

3 **Select [Connection Test] and access to test**



- Performs automatic testing of the network connection for the TV. (It takes a while to test.)



☑ **: succeeded**

The test is successful and the TV is connected to the network.

☒ **: failed**

Check the settings and connections, and then perform this function again.

Network settings for the Wireless LAN connection

This setting is for the network connection by using a Wireless LAN Adaptor.

- Confirm the encryption key, settings and positions of your access point before starting setup. For details, read the manual of the access point.

1 Select [Network Type] and set to [Wireless]

Network Setup	
Connection Test	
Network Type	Wireless
Access Point Settings	
IP/DNS Settings	
Network Link Settings	
Software Update	
MAC Address	12-34-56-78-9a-bc

2 Select [Access Point Settings]

Network Setup	
Connection Test	
Network Type	Wireless
Access Point Settings	Access
IP/DNS Settings	
Network Link Settings	
Software Update	
MAC Address	12-34-56-78-9a-bc

3 Select the connection type and set

Connection Type
Please select network connection type.
WPS(Push button)
WPS(PIN)
Search for access point
Manual

WPS(Push button) ➡ **(p. 16)**

WPS(PIN) : Sets by entering the PIN code to the access point
Search for access point ➡ **(p. 16)**

Manual : Sets manually by entering the SSID of access point
Follow the on screen instructions

4 Select [Connection Test] and access to test

Network Setup	
Connection Test	Access
Network Type	Wireless
Access Point Settings	
IP/DNS Settings	
Network Link Settings	
Software Update	
MAC Address	12-34-56-78-9a-bc

Connection Test
☑ Check access point connection.
☑ Check acquired IP address.
☑ Check for devices using same IP address.
☑ Check gateway connection.
☑ Check server connection.

Performs automatic testing of the network connection for the TV. (It takes a while to test.)

☑ **: succeeded**

The test is successful and the TV is connected to the network.

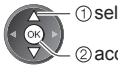
☒ **: failed**

Check the settings and connections, and then perform this function again.
If you continue to have difficulty, please contact your internet service provider.

Update TV's software

Accesses the specific web site to update TV's software and search if any software updates are available.

Network Setup	
Connection Test	
Network Type	Wired
Access Point Settings	
IP/DNS Settings	
Network Link Settings	
Software Update	Access
MAC Address	12-34-56-78-9a-bc



- Follow the on screen instructions

Note

Network Setup	
Connection Test	
Network Type	Wired
Access Point Settings	
IP/DNS Settings	
Network Link Settings	
Software Update	
MAC Address	12-34-56-78-9a-bc

[MAC Address]

- MAC address is a unique address that identifies hardware in the network. (for information only)

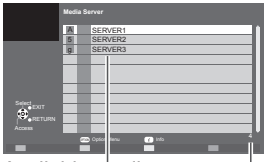
- Ensure the preparation of the media server, network connections and network settings are completed.
  ➡ **"Media server" (p. 69), "Network connections" (p. 70), "Network Setup" (p. 71 - 74)**

1 Display icons of the feature

2 Select [Media Server]

3 Select one of the media servers you want to access

Media server list



Available media servers

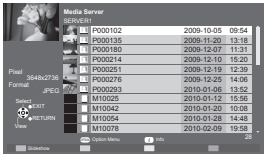
Total listed number

- To display the information of the highlighted media server

INFO

4 Select the file to be viewed

File list



- Depending on the conditions of the media server, you may need to select the folder before selecting the file.
- Slideshow ➡ **(p. 76)**
- To display the information of the highlighted file

INFO

Note

- You may select and play back the music file.
- Non-playable files are also listed but cannot be selected.
- Turn the TV off, and then on again when changing or reconnecting the network connection.

■ To return to TV

EXIT

■ To return to the previous screen

RETURN

For photo file

[Single view] - Displayed one at a time

Operation guide

- To display / hide the operation guide INFO
- To operate Single view
  - To the previous photo
  - To the next photo
  - Slideshow
  - Stop (return to list)
- To rotate 90° B
- To return to the list RETURN

[Slideshow] - Slideshow will be started from the selected photo file and completed within the list.

Start Slideshow R

- To display / hide the operation guide INFO
- To pause (return to Single view)
- To return to the list RETURN

For video file

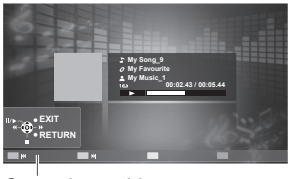
Playback - Playback will start.

Operation guide

- To display / hide the operation guide and information banner INFO
- To operate the playback
  - Rewind
  - [Manual skip]
    (Skip to a fixed period forward manually
    for MPEG-2 (PS format and TS format) only)
  - Pause / Playback
  - Fast forward
  - Stop
- To the previous content R
- To the next content G
- To change aspect ASPECT
- To return to the list RETURN

For music file

Playback - Playback will start.



Operation guide

- To display / hide the operation guide INFO
- To operate playback
  - Rewind
  - Pause / Playback
  - Fast forward
  - Stop
- To the previous track R
- To the next track G
- To return to thumbnail RETURN

Photo Setup (for photo contents)

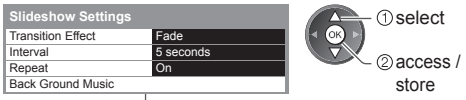
Setup the settings for Photo.

1 Display the option menu

OPTION

2 Select [Slideshow Settings]

3 Select the items and set



Item	Adjustments / Configurations (alternatives)
Transition Effect	Selects the transition effect for switching the photo during the slideshow **[Off] / [Fade] / [Slide] / [Dissolve] / [Motion] / [Random]** **[Fade]:** The next photo fades in gradually. **[Slide]:** The next photo slides and appears from the left side. **[Dissolve]:** The photo is replaced by an indefinite block unit. **[Motion]:** The photo is replaced with enlarged, reduced, moved up or moved down. **[Random]:** Each transition is selected at random.
Interval	Selects slideshow interval **[5] / [10] / [15] / [30] / [60] / [90] / [120] (seconds)**
Repeat	Slideshow repeat **[Off] / [On]**
Back Ground Music	Selects the background music while photo **[Off] / [Type1] / [Type2] / [Type3]** •[Type1], [Type2] and [Type3] are the fixed music each installed in this TV.

Video Setup (for video contents)

Setup the settings for Video mode.

1 Display the option menu

OPTION

2 Select [Video Setup]

3 Select the items and set

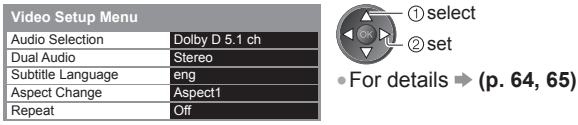
•For details ➡ **(p. 64)**

Confirm or change the current status (for video contents)

1 Display the option menu during playback

OPTION

2 Select the items and set



•For details ➡ **(p. 64, 65)**

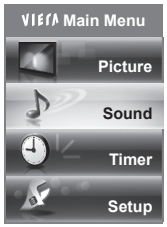
Item	Adjustments / Configurations (alternatives)
Dual Audio	Selects multiplex sound (if available)
Subtitle Language	Allows you to select the language in which subtitles should appear (if available)

Audio output settings (for video contents)

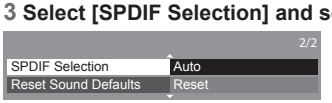
You can enjoy the multi-channel sound via an amplifier connected to the DIGITAL AUDIO OUT terminal.

1 Display the menu
MENU

2 Select [Sound]



3 Select [SPDIF Selection] and set



- For details ➡ **(p. 67)**

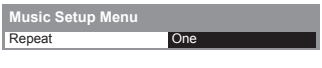
Music Setup

Setup the setting for Music mode.

1 Display the option menu
OPTION

2 Select [Music Setup]

3 Set



[Folder]: Playback repeats within the selected folder
[One]: Playback repeats of the selected one file

VIERA Connect

You can access a selection of internet services from VIERA Connect home screen.

- VIERA Connect requires a broadband internet connection. Dial-up internet connections cannot be used.
- Ensure the network connections and network settings are completed.
  ➡ **"Network connections" (p. 70), "Network Setup" (p. 71 - 74)**
- For details about VIERA Connect operation ➡ **"Using "VIERA Connect"" (p. 17)**
- Setup menu (Items in the [Setup] may change without notice.)

Customize HomeScreen	Changes the position of each services on VIERA Connect home screen
My Account	Confirms or removes the account information of the TV you entered on VIERA Connect
Lock	Sets to restrict access to some services
Beep	Sets beep sound On or Off when operating VIERA Connect
Notices	Displays the information of VIERA Connect

Note

- Be sure to update the software when a software update notice is displayed on the TV screen. If the software is not updated, you will not be able to use VIERA Connect.
  You can update the software later manually [Software Update] in the Network Setup Menu **(p. 74)**
- VIERA Connect home screen is subject to change without notice.
- The services through VIERA Connect are operated by their respective service providers, and service may be discontinued either temporarily or permanently without notice. Therefore, Panasonic will make no warranty for the content or the continuity of the services.
- Some content may be inappropriate for some viewers.
- Some content may only be available for specific countries and may be presented in specific languages.
- Depending on the connection environment, the internet connection may be slow or may not be successful.
- Turn the TV off, and then on again when changing or reconnecting the network connection.
- Registration is required to access certain Internet contents. Refer registration steps shown on the screen when accessing Internet contents feature.

VIERA Link Functions

VIERA Link “ HDAVI Control™”

Enjoy additional HDMI interoperability with Panasonic products which have “HDAVI Control” function. This TV supports “HDAVI Control 5” function.
Connections to equipment with HDMI cable such as a DIGA Recorder, HD Video Camera, Player theatre, Amplifier, etc., allow you to interface to them automatically.
These features are limited to models incorporating “HDAVI Control” and “VIERA Link”.

- Some functions are not available depending on the equipment’s version of HDAVI Control. Please confirm the connected equipment’s version of HDAVI Control.
- VIERA Link “HDAVI Control”, based on the control functions provided by HDMI which is an industry standard known as HDMI CEC (Consumer Electronics Control), is a unique function that we have developed and added. As such, its operation with other manufacturers’ equipment that supports HDMI CEC cannot be guaranteed.
- Please refer to individual manuals for the external equipment. About applicable Panasonic equipment, consult your local Panasonic dealer.

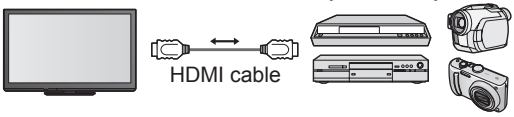
Summary of features

Features \ Connected equipment with VIERA Link function	DIGA Recorder*1	DVD Player / Blu-ray Disc Player*1	HD Video Camera / LUMIX Camera*1	Player theatre*2	Blu-ray Disc theatre*2	Amplifier*2
Channel download	○*4	–	–	–	–	–
Easy playback	○	○	○	○*7	○*7	–
Power on link	○	○	○	○	○	–
Power off link	○	○	○	○	○	○
Reduce unnecessary power consumption in standby	○*5	○*5	–	–	○*5	–
Auto standby for unnecessary equipment	○*3	○*3	–	○*3*8	○*3*8	○*3
Pause Live TV programme	○*4 *6	–	–	–	–	–
Direct TV Recording	○*4	–	–	–	–	–
Control the menu of the connected equipment by VIERA remote control	○*3	○*3	○*3	○*3	○*3	–
Speaker control	–	–	–	○	○	○

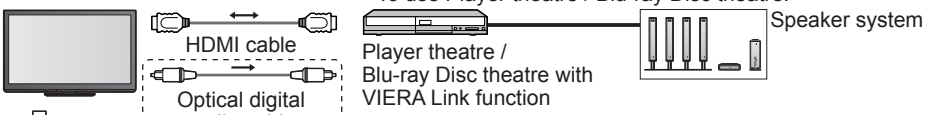
*1: HDMI Connection only
*2: HDMI and Audio out connections
*3: available with equipment which has “HDAVI Control 2 or later” function
*4: available with equipment which has “HDAVI Control 3 or later” function
*5: available with equipment which has “HDAVI Control 4 or later” function
*6: available with DIGA Recorder which has HDD
*7: while playing a disc
*8: except for watching a disc

Connection

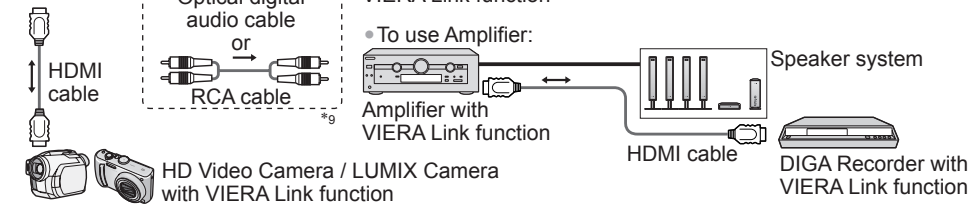
- To use DIGA Recorder / DVD Player / Blu-ray Disc Player / HD Video Camera / LUMIX Camera:



- To use Player theatre / Blu-ray Disc theatre:



- To use Amplifier:



*9: If the connected equipment has “HDAVI Control 5” function, you do not have to use this audio cable (Optical digital audio cable or RCA cable). In this case, connect the equipment to the TV’s HDMI2 terminal via an HDMI cable.

Note

- For a DIGA Recorder / DVD Player / Blu-ray Disc Player / HD Video Camera / LUMIX Camera with VIERA Link function, connect to HDMI1, HDMI2 or HDMI3 terminal via an HDMI cable.
- For a Player theatre / Blu-ray Disc theatre / Amplifier, connect to HDMI1, HDMI2 or HDMI3 terminal via an HDMI cable, and also connect either the optical digital audio cable or RCA cable for audio output from the TV.
- Use fully wired HDMI compliant cable. Non-HDMI-compliant cables cannot be utilised.
  A recommended Panasonic's HDMI cable part number:
  • RP-CDHS15 (1.5 m) • RP-CDHS30 (3.0 m) • RP-CDHS50 (5.0 m)

Preparations

- Connect the equipment supporting VIERA Link.
- Set up the connected equipment. Read the manual of the equipment.
- For optimal recording, the settings of the recorder may need to be changed. For details, read the manual of the recorder.
- Set [VIERA Link] [On] in the Setup Menu ➡ **[VIERA Link] (p. 40)**
- Set up the TV
  ➡ **After connection, turn the equipment on and then switch the TV on. Select the input mode to HDMI1, HDMI2, HDMI3 or HDMI4 (p. 23), and make sure that an image is displayed correctly.**
  This setup should be done each time when the following conditions occur:
  • for the first time • when adding or reconnecting equipment • when changing setup

Features available

Channel download

Channel settings can be downloaded to the recorder.

Easy playback

Automatic input switching - When connected equipment is operated, the input mode is switched automatically.

[Power on link]

Set Power on Link [On] in the Setup Menu to use this function ➡ [Power on Link] (p. 40)
When the connected equipment starts playback or direct navigator / function menu for the equipment are activated, the TV is automatically turned on. (Only when the TV is in Standby mode.)

[Power off link]

Set Power off Link [On] in the Setup Menu to use this function ➡ [Power off Link] (p. 40)
When the TV is set to Standby mode, the connected equipment is also automatically set to Standby.
- This function will work even if the TV enters Standby mode automatically by auto power standby function.

[Standby Power Save] - Reduce unnecessary power consumption in standby

Set Standby Power Save [On] in the Setup Menu to use this function ➡ [Standby Power Save] (p. 40)
The power consumption in Standby mode of the connected equipment is controlled higher or lower in synchronisation with the TV On / Off state to reduce the consumption.
When the TV is set to Standby mode, the connected equipment is automatically set to Standby and the power consumption in Standby mode of the connected equipment is automatically minimised.
When the TV is turned on, the connected equipment is still in Standby mode, but the power consumption is increased to make startup time early.
- This function is effective if the connected equipment can change the power consumption in Standby mode and is set to higher consumption.
- This function will work when [Power off Link] is set to [On].

[Intelligent Auto Standby] - Auto standby for unnecessary equipment

Set Intelligent Auto Standby [On (With reminder)] or [On (No reminder)] in the Setup Menu to use this function ➡ [Intelligent Auto Standby] (p. 40)
When the TV is On, non-watched or non-used connected equipment goes into Standby mode automatically to reduce the power consumption. For example, when the input mode is switched from HDMI, when Speaker Selection is changed to [TV] (except for watching a disc).
- If you select [On (With reminder)], the on screen message will be displayed to be noticed before working this function.
- This function may not work properly depending on the connected equipment. If required, set to [Off].

[Pause Live TV]

You can pause the live TV programme and resume later.
Live TV programmes will be recorded on HDD of the connected DIGA Recorder.
- This function is available with a DIGA Recorder which has HDD.
- If you connect a variety of recorders including other manufacturers' recorders at the same time, please connect the DIGA Recorder which has HDD to the TV's lower HDMI terminal number. For example, if you use HDMI1 and HDMI2 for two recorders, in this case connect DIGA Recorder which has HDD to HDMI1.
- If you cannot operate, check the settings and the equipment
  ➡ **"Summary of features", "Connection", "Preparations" (p. 79 - 80)**

Access and pause the live TV programme

1 Display [VIERA Link Menu]

2 Select [Pause Live TV] and pause

The TV picture will be paused.

VIERA Link Menu	
Pause Live TV	Start
Direct TV Rec	Start
VIERA Link Control	Recorder
Speaker Selection	Home Cinema

① select
② pause

- The live TV programme is recorded on HDD from where it was paused
- If the paused TV picture disappears after a few minutes,

  OPTION ➡ (the paused picture will be restored)

■ To operate Pause Live TV

search backward
pause
search forward
playback
stop

- Operations may be different depending on the recorder. In this case, follow the operation guide or read the manual of the recorder.

■ To return to Live TV
(stop playback of Pause Live TV / cancel pause)

TV ➡

Pause Live TV	
Stop Pause Live TV?	
Yes	No

① select [Yes]
② stop

- If you stop playback or cancel pause, the recorded programme will be deleted from HDD.

[Direct TV Rec] - What you see is What you record

Recording the current programme in DIGA Recorder immediately.
- If you connect a variety of recorders including other manufacturers' recorders at the same time, please connect DIGA Recorder to the TV's lower HDMI terminal number. For example, if you use HDMI1 and HDMI2 for two recorders, in this case connect DIGA Recorder to HDMI1.
- If you cannot operate, check the settings and the equipment
  ➡ **"Summary of features", "Connection", "Preparations" (p. 79 - 80)**

1 Display [VIERA Link Menu]

2 Select [Direct TV Rec] and start recording

VIERA Link Menu	
Pause Live TV	Start
Direct TV Rec	Start
VIERA Link Control	Recorder
Speaker Selection	Home Cinema

① select
② start

■ To stop recording

Select [Stop] in [Direct TV Rec] and stop recording

VIERA Link Menu	
Pause Live TV	Start
Direct TV Rec	Stop
VIERA Link Control	Recorder
Speaker Selection	Home Cinema

① select
② stop

[VIERA Link Control] - Operate the connected equipment with VIERA remote control

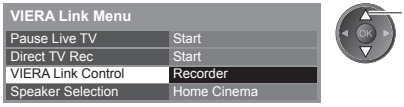
You can control some functions of the connected equipment with this TV remote control by pointing at the TV's signal receiver.

- If you cannot operate, check the settings and the equipment
  ➡ **"Summary of features", "Connection", "Preparations" (p. 79 - 80)**
- For details of the operations for the connected equipment, read the manual of the equipment.

Access and operate the menu of the equipment

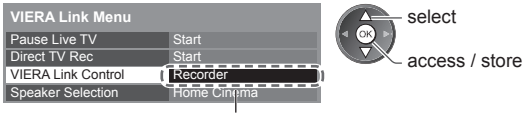
1 Display [VIERA Link Menu]

2 Select [VIERA Link Control]



3 Select the equipment you want to access

The type of the connected equipment is displayed.
Select the type of the equipment and access.



[Recorder] / [Player] / [Home Cinema] / [Video Camera] / [LUMIX] / [Digital Camera] / [Other]

- You can also access directly by using VIERA TOOLS ➡ **(p. 31)**
- The displayed item may vary depending on the connected equipment.
- [Home Cinema] means Player theatre, Blu-ray Disc theatre or Recorder theatre.
- [Other] means Tuner set top box.

The menu of the accessed equipment
(Input mode will be changed automatically)

4 Operate the connected equipment

- To display the operation guide

- Move the cursor / select the menu
- Move the cursor / access / adjust
- Store / set / access
- Return to the previous menu

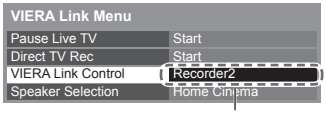
- Exit the menu

When the key words are displayed on colour bar

Note

- Some operations may not be available depending on the equipment. If so, use its own remote control.

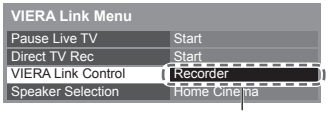
■ If multiple recorders or players are connected



[Recorder1-3 / Player1-3]

The number is given from the TV's lower HDMI terminal number connected to the same type equipment. For example, two recorders to HDMI2 and HDMI3, in this case the recorder connected to HDMI2 is displayed as [Recorder1], and the recorder connected to HDMI3 is displayed as [Recorder2].

■ If you access non-VIERA Link equipment



Type of the connected equipment is displayed.

You can access the menu of the equipment, but you cannot operate it. Use its own remote control to operate the equipment.

[Speaker Selection] - Speaker control

You can control the theatre speaker with this TV remote control by pointing at the TV's signal receiver.
- If you cannot operate, check the settings and the equipment
  ➡ **"Summary of features", "Connection", "Preparations" (p. 79 - 80)**

Access and control the speaker volume

1 Display [VIERA Link Menu]

2 Select [Speaker Selection]

VIERA Link Menu	
Pause Live TV	Start
Direct TV Rec	Start
VIERA Link Control	Recorder
Speaker Selection	Home Cinema

3 Set to [Home Cinema] or [TV]

[Home Cinema]

Player theatre, Blu-ray Disc theatre or Amplifier will be automatically turned on if it is in Standby mode and the sound is from theatre speakers connected to the equipment.

- Volume up / down (+ VOL −)
- Mute (MUTE)
- The sound of TV speakers is mute.
- When the equipment is turned off, TV speakers will be active.

[TV]

TV speakers are active.

Multi-channel sound

- If you wish to enjoy the multi-channel sound (e.g. Dolby Digital 5.1ch) via an Amplifier, connect with HDMI cable and Optical digital audio cable (p. 79), and then select [Home Cinema]. If your Amplifier has "HDAVI Control 5" function, you can connect only with HDMI cable. In this case, connect your Amplifier to the TV's HDMI2 terminal.
  To enjoy the sound from the DIGA Recorder in multi-channel sound, connect an HDMI cable from the DIGA Recorder to the Amplifier (p. 79).

Note

- These functions may not work properly depending on the connected equipment.
- Image or sound may not be available for the first few seconds when the Input mode is switched.
- Easy playback may be available by using the remote control for Player theatre, Blu-ray Disc theatre or Amplifier. Read the manual of the equipment.
- "HDAVI Control 5" is the newest standard (current as of December, 2010) for HDAVI Control compatible equipment. This standard is compatible with conventional HDAVI equipment.
- To confirm this TV's version of HDAVI Control ➡ **[System Information] (p. 40)**

External Equipment

These diagrams show our recommendations for connection of your TV to various pieces of equipment. For other connections, consult the instructions for each piece of equipment, the table below, and the specifications (p. 98).

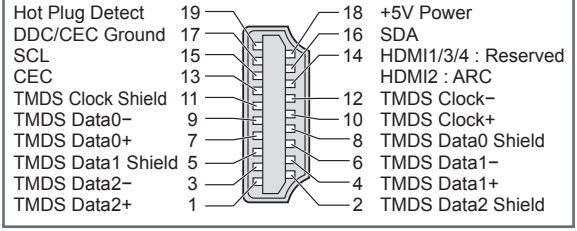
Types of connectable equipment to each terminal

Equipment	Terminal					
	AV1 IN	AV2 IN	AV3 IN (Side panel of the TV)	AUDIO OUT	DIGITAL AUDIO OUT	HDMI 1 - 4
To play back videocassettes / DVDs (VCR / DVD Recorder)	○	○	○			*1 ○
To watch DVDs (DVD Player)	○	○	○			○
To watch satellite broadcasts (Set top box)	○	○	○			○
To watch camcorder images (Video camera)	○	○	○			○
To play games (Game equipment)	○	○	○			○
To use amplifier with speaker system				○	○	*2 ○
VIERA Link						○

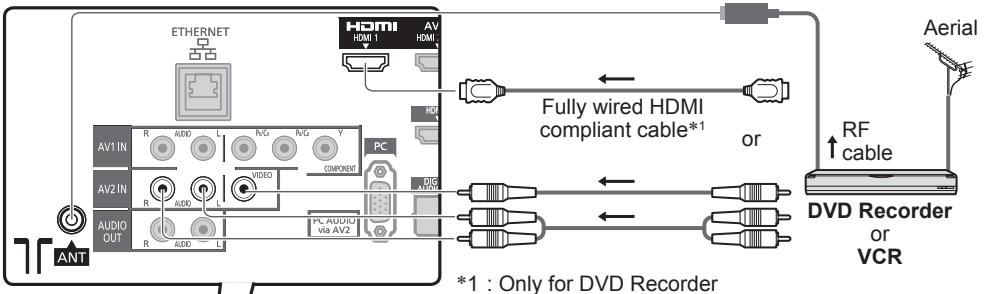
Equipment	Terminal	
	ETHERNET	USB 1 - 3
To use Network services	○	○

○: Recommended Connection
*1 : Only for DVD Recorder
*2 : Use HDMI2 for connecting an amplifier. This connection is applicable when using an amplifier that has ARC (Audio Return Channel) function.

HDMI terminal

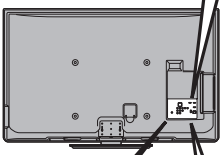


To play back



*1 : Only for DVD Recorder

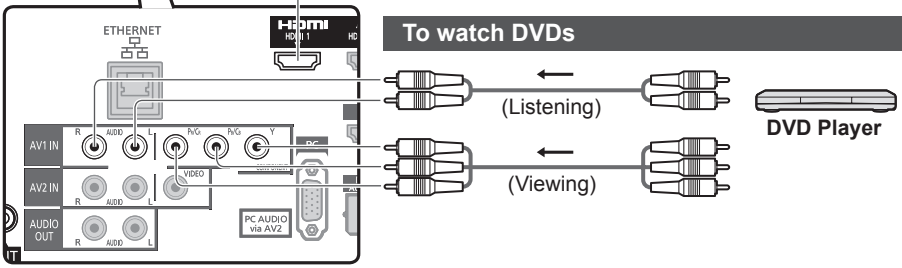
Rear of the TV



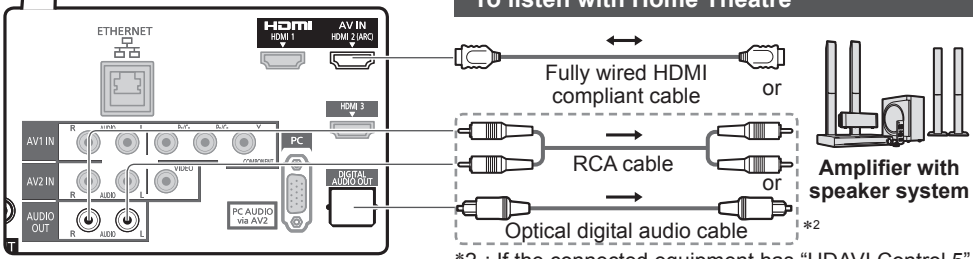
HDMI equipment

- HDMI connection ➡ **(p. 79, 88)**

To watch DVDs

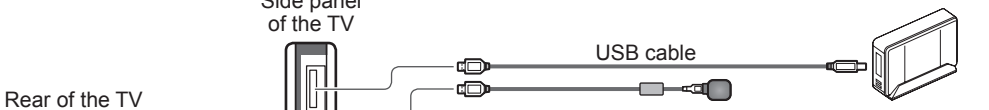


To listen with Home Theatre

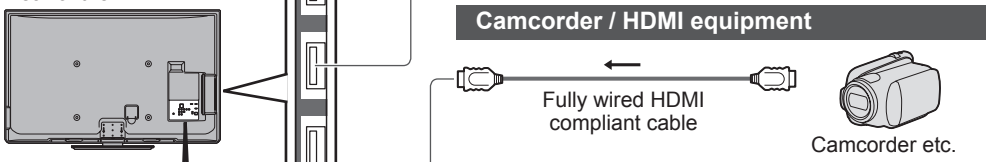


*2 : If the connected equipment has “HDAVI Control 5” function, you do not have to use this audio cable (Optical digital audio cable or RCA cable). In this case, connect the equipment to the TV’s HDMI2 terminal via an HDMI cable.

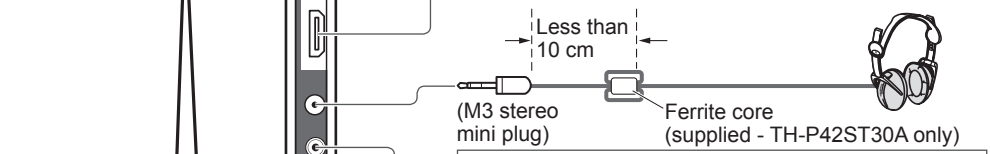
USB devices



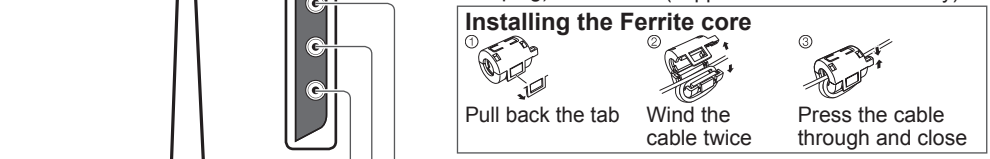
Camcorder / HDMI equipment



Headphones

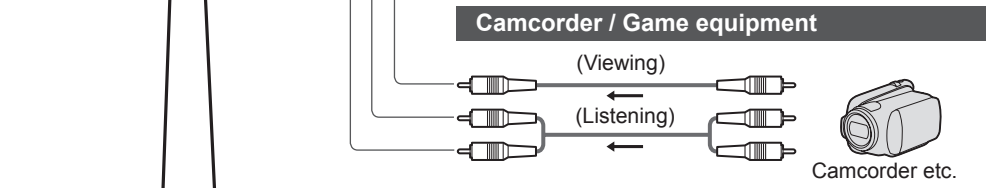


Installing the Ferrite core

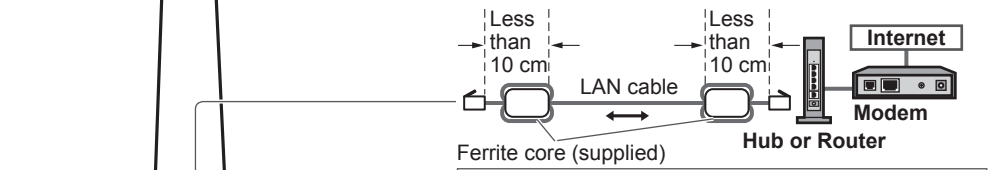


To adjust volume
➡ **[Headphone Volume] in the Sound Menu (p. 36)**

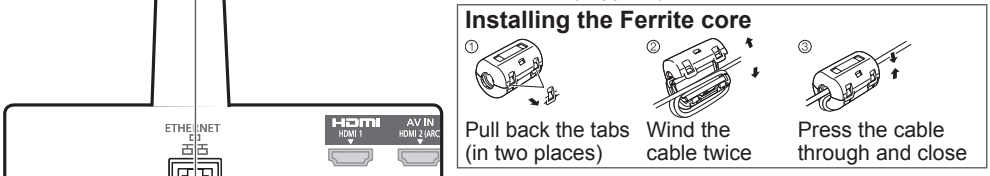
Camcorder / Game equipment



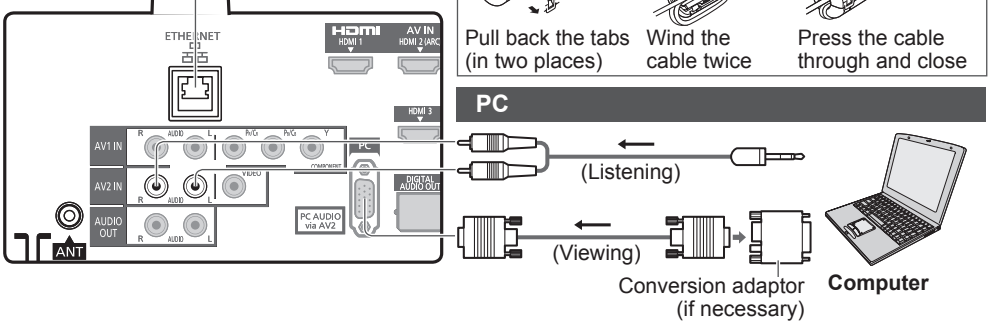
Network



Installing the Ferrite core



PC



Technical Information

Channel Allocation (Analogue TV mode)

CH Display / Receive Channel			
CH 0 - CH 5	S 2 - S 10	CH 5A	CH 6 - CH 9
CH 9A	CH 10 - CH 12	S 11 - S 44	CH 20 - CH 75

Rating (Digital TV mode)

Rating	Meaning	Rating	Meaning
No Block	Not classified	M	Mature
P	Pre school	MA 15+	Mature Adult 15+
C	Children	AV 15+	Adult strong Violence 15+
G	General	R	Restricted 18+
PG	Parental Guidance recommended		

Stereo / Bilingual Sound Selection (Analogue TV mode)

When you receive the stereo / bilingual sound system, sound output modes can be selected by using the [MPX] in the Sound Menu.

Audio Signal	STEREO	MAIN I	SUB II	MONO
Mode Indicator	◯◯	I	II	▽

NICAM .....Used in New Zealand, Singapore, Hong Kong etc.

Type of broadcast	Regular broadcast (Standard Audio)	Regular + NICAM MONO I (MAIN I)	NICAM STEREO	NICAM DUAL MONO (MAIN I / SUB II)
Mode Indicator	No Indicator ⟷ ▽	I ⟷ ▽	◯◯ ⟷ ▽	I ⟶ II ▽

A2 (German) .....Used in Australia, Malaysia etc.

Type of broadcast	Regular broadcast (Standard Audio)	BILINGUAL or DUAL MONO: MAIN I / SUB II	STEREO
Mode Indicator	No Indicator ⟷ ▽	I ⟷ II	◯◯ ⟷ ▽

- If the stereo signal is poor or the receiving conditions are not optimum or if STEREO:MONO automatic switching occurs, it is recommended you switch from STEREO to MONO.
- Even when the contents of the receiving signal undergo changes, selection mode is kept intact.
- When the receiving conditions deteriorate, listening will be easier if the mode is set to the MONO position, using the Sound Selection button.
- DUAL, also known as DUAL MONO or as BILINGUAL is not currently transmitted in some countries.

HDMI connection

HDMI (high-definition multimedia interface) is the world's first complete digital consumer AV interface complying with a non-compression standard.
HDMI allows you to enjoy high-definition digital images and high-quality sound by connecting the TV and the equipment.
HDMI-compatible equipment*1 with an HDMI or DVI output terminal, such as a DVD player, a set top box or game equipment, can be connected to the HDMI terminal using an HDMI compliant (fully wired) cable.
About connections, see "External Equipment" (p. 84 - 86).

Applicable HDMI features

- Input audio signal: 2ch Linear PCM (sampling frequencies - 48 kHz, 44.1 kHz, 32 kHz)
- Input video signal: 480i, 480p, 576i, 576p, 720p, 1080i and 1080p
  ➡ **"Input signal that can be displayed" (p. 89)**
  Match the output setting of the digital equipment.
- Input PC signal: ➡ **"Input signal that can be displayed" (p. 89)**
  Match the output setting of the PC.
- VIERA Link (HDAVI Control 5) : ➡ **[VIERA Link] (p. 79)**
- Audio Return Channel*2 (HDMI2 terminal only)

DVI connection

If the external equipment has only a DVI output, connect to the HDMI terminal via a DVI to HDMI adaptor cable*3. When the DVI to HDMI adaptor cable is used, connect the audio cable to the audio input terminal (HDMI1 / 2 / 3: use AV2 audio terminals, HDMI4: use AV3 audio terminals).
If the picture position is not fit to the screen during the DVI connection, adjust the position on [DVI Position Settings] in the Setup Menu (p. 38). The settings are memorised for each HDMI terminals and input signals.

Note

- Audio settings can be made on the [HDMI1 / 2 / 3 / 4 Input] in the Sound Menu. (p. 37)
- If the connected equipment has an aspect adjustment function, set the aspect ratio to [16:9].
- These HDMI connectors are "type A".
- These HDMI connectors are compatible with HDCP (High-Bandwidth Digital Content Protection) copyright protection.
- Equipment having no digital output terminal may be connected to the input terminal of "COMPONENT" or "VIDEO" to receive analogue signals.
- This TV incorporates HDMI™ technology.

*1: The HDMI logo is displayed on HDMI-compliant equipment.
*2: Audio Return Channel (ARC) is a function to be able to send digital sound signals via an HDMI cable.
*3: Enquire at your local digital equipment retailer shop.

PC connection

A PC may be connected to this TV so that the PC screen is displayed and sound is heard from the TV.

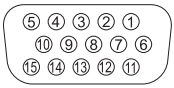
- PC signals that can be inputted: Horizontal scanning frequency 31 to 69 kHz; vertical scanning frequency 59 to 86 Hz (more than 1,024 signal lines could result in incorrect display of the image).
- A PC adaptor is not necessary for the DOS/V-compliant D-sub 15-pin connector.

Note

- Some PC models cannot be connected to this TV.
- When using PC, set the colour display quality of PC to the highest position.
- For details of the applicable PC signals, see p. 89.
- Max. display resolution

Aspect	**4:3**	1,440 × 1,080 pixels
	16:9	1,920 × 1,080 pixels

- D-sub 15-pin connector signal



Pin No.	Signal Name	Pin No.	Signal Name	Pin No.	Signal Name
①	R	⑥	GND (Ground)	⑪	NC (not connected)
②	G	⑦	GND (Ground)	⑫	NC (not connected)
③	B	⑧	GND (Ground)	⑬	HD
④	NC (not connected)	⑨	NC (not connected)	⑭	VD
⑤	GND (Ground)	⑩	GND (Ground)	⑮	NC (not connected)

Input signal that can be displayed

COMPONENT (Y, P_B/C_B, P_R/C_R), HDMI

○ Mark: Applicable input signal

Signal name	COMPONENT	HDMI
525 (480) / 60i	○	○
525 (480) / 60p	○	○
625 (576) / 50i	○	○
625 (576) / 50p	○	○
750 (720) / 60p	○	○
750 (720) / 50p	○	○
1,125 (1,080) / 60i	○	○
1,125 (1,080) / 50i	○	○
1,125 (1,080) / 60p		○
1,125 (1,080) / 50p		○
1,125 (1,080) / 24p		○

PC (from D-sub 15P)

Applicable input signal for PC is basically compatible to VESA standard timing.

Signal name	Horizontal frequency (kHz)	Vertical frequency (Hz)
640 × 400 @70 Hz	31.47	70.07
640 × 480 @60 Hz	31.47	59.94
640 × 480 @75 Hz	37.50	75.00
800 × 600 @60 Hz	37.88	60.32
800 × 600 @75 Hz	46.88	75.00
800 × 600 @85 Hz	53.67	85.06
852 × 480 @60 Hz	31.44	59.89
1,024 × 768 @60 Hz	48.36	60.00
1,024 × 768 @70 Hz	56.48	70.07
1,024 × 768 @75 Hz	60.02	75.03
1,024 × 768 @85 Hz	68.68	85.00
1,280 × 1,024 @60 Hz	63.98	60.02
1,280 × 768 @60 Hz	47.70	60.00
1,366 × 768 @60 Hz	48.39	60.04
Macintosh13” (640 × 480)	35.00	66.67
Macintosh16” (832 × 624)	49.73	74.55
Macintosh21” (1,152 × 870)	68.68	75.06

PC (from HDMI terminal)

Applicable input signal for PC is basically compatible to HDMI standard timing.

Signal name	Horizontal frequency (kHz)	Vertical frequency (Hz)
640 × 480 @60 Hz	31.47	60.00
750 (720) / 60p	45.00	60.00
1,125 (1,080) / 60p	67.50	60.00

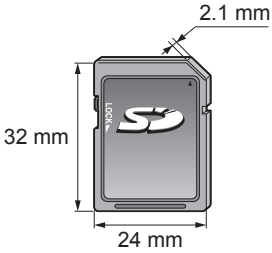
Note

- Signals other than above may not be displayed properly.
- The above signals are reformatted for optimal viewing on your display.
- PC signal is magnified or compressed for display, so that it may not be possible to show fine detail with sufficient clarity.

Devices for recording or playing back

SD Card for recording the digital TV programmes with this TV and playing back in media player
Card format : SDXC Card - exFAT
SDHC Card / SD Card - FAT16 or FAT32
Compliant card type (maximum capacity) : SDXC Card (64 GB), SDHC Card (32 GB), SD Card (2 GB), miniSD Card (2 GB) (requiring miniSD adaptor)

- For recording to SD Card, we recommend to use SDHC card (CLASS 10 or more) or SDXC card.
- If miniSD Card is used, insert / remove it together with the adaptor.
- Check the latest information on the card type at the following website. (English only)
  http://panasonic.jp/support/global/cs/tv/
- Use an SD Card which meets SD standards. If not, it may cause the TV to malfunction.
- Do not remove the card while the TV is accessing data (this can damage the card or TV).
- Do not touch the pins on the back of the card.
- Do not subject the card to high pressure or impact.
- Insert the card in the correct direction (otherwise, card may be damaged).
- Electrical interference, static electricity, or erroneous operation may damage the data or card.
- Back up the recorded data at regular intervals in case of deteriorated or damaged data or erratic operation of the TV. (Panasonic is not liable for any deterioration or damage of recorded data.)



USB Flash Memory (for playing back in Media Player)
Format : FAT16, FAT32 or exFAT

USB HDD (for recording the digital TV programmes with this TV and playing back in Media Player)
The capacity of USB HDD that have been tested for the performance with this TV : From 160 GB to 3 TB

- Connect the USB HDD to the socket outlet to record and play back properly with this TV.
- Format the USB HDD with this TV in order to use it. ➡ **(p. 53)**
- Regarding the performance, not all USB HDDs are guaranteed. Check the USB HDDs that have been tested for the performance with this TV at the following website. (English only)
  http://panasonic.jp/support/global/cs/tv/

On screen messages

Message	Meaning / Action
Cannot read file	• The file is broken or unreadable. • The TV does not support the format.
No Device Inserted	• Confirm SD Card or USB device is inserted correctly.
No valid file to play	• The card has no data.
This operation is not possible	• Your operation is not available.

Supported file format in Media Player / DLNA

■ **Photo**

Format	File extension	Image resolution (pixel)	Details / Restrictions
JPEG	.jpg .mpo	8 × 8 to 30,719 × 17,279	DCF*1 and EXIF*2 standards Sub-sampling : 4:4:4, 4:2:2, 4:2:0 • Progressive JPEG is not supported.

*1 : Design rule for Camera File system - unified standard established by Japan Electronics and Information Technology Industries Association (JEITA)
*2 : Exchangeable Image File - image file format used by digital cameras

■ **Video**

Container	File extension	Video codec	Audio codec	Details / Restrictions
SD-Video	.mod	MPEG1 MPEG2	MPEG Dolby Digital	SD-Video Standard Ver. 1.3 (Entertainment Video Profile) • The data may not be available if a folder structure on the current device is modified.
AVCHD	.mts	H.264	Dolby Digital	AVCHD Standard (including 3D videos recorded by the 3D-compatible Video Camera) • The data may not be available if a folder structure on the current device is modified.
AVI	.avi .divx	DIV3 DIV4 DIVX DX50 DIV6 XviD MPEG4 SP/ASP	MP3 Dolby Digital MPEG	DivX video file ➡ "DivX" (p. 92) DivX Certified® to play DivX® video up to HD 1080p, including premium content.
MKV	.mkv	H.264 BP/MP/HP	MP3 Dolby Digital MPEG AAC DTS core	• Chapters and some subtitles are not supported during playback.
ASF	.asf .wmv	Windows Media Video v9 VC-1	WMA	• Copy-protected files cannot be played back. • WMA Pro and WMA Lossless are not supported.
MP4	.mp4	H.264 BP/MP/HP	MP3 Dolby Digital AAC	–
MOV	.mov	MotionJPEG H.264 BP/MP/HP	RAW TWOS SOWT MP3 Dolby Digital LPCM AAC	• This TV supports Motion JPEG recorded by Panasonic LUMIX Camera. • Some files may not be played back depending on these recording condition. • Motion JPEG can be played back only in Media Player.
TS	.ts .tp	MPEG2 H.264	Dolby Digital Dolby Digital Plus HE-AAC AAC MP3	• This container can be played back only in DLNA feature.

■ **Music**

Codec	File extension	Restrictions
MP3	.mp3	–
AAC	.m4a	• Copy-protected files cannot be played back.
WMA	.wma	• Copy-protected files cannot be played back. • WMA Pro and WMA Lossless are not supported.

Note

- The above table is generalised in nature. Due to file encoding variances, some media files that play on other devices, may not play on the TV even though they fulfill the generalised conditions.
- Do not use two-byte characters or other special codes for data.
- The card may become unusable with this TV if the file or folder names are changed.

DivX

DivX Certified® to play DivX® and DivX Plus™ HD (H.264/MKV) video up to 1080p HD including premium content.

ABOUT DIVX VIDEO:
DivX® is a digital video format created by DivX, Inc. This is an official DivX Certified® device that plays DivX video.
Visit www.divx.com for more information and software tools to convert your files into DivX video.

Subtitle text file of DivX

Subtitles format - MicroDVD, SubRip, TMPlayer

- The DivX video file and subtitles text file are inside the same folder, and the file names are the same except for the file extensions.
- If there are more than one subtitles text files inside the same folder, they are displayed in the following order of priority: ".srt", ".sub", ".txt".
- To confirm or change the current subtitle status while playing DivX content, press the OPTION button to display Option Menu.
- Depending on the methods used to create the file or the state of recording, only parts of the subtitles may be displayed, or the subtitles may not be displayed at all.

Note

- Depending on how you make SD Card or USB Flash Memory, files and folders may not be displayed in the order you numbered.
- Depending on how you create the files and the structure of folders, the files and folders may not be displayed.
- When there are many files and folders, operation may take time to complete or some files may not be displayed or playable.

ABOUT DIVX VIDEO-ON-DEMAND:
This DivX Certified® device must be registered in order to play purchased DivX Video-on-Demand (VOD) movies. To obtain your registration code, locate the DivX VOD section in your device setup menu. Go to vod.divx.com for more information on how to complete your registration.

To show DivX VOD registration code

➡ [DivX® VOD] in the Setup Menu (p. 40)

- If you want to generate the new registration code, you have to deregister the present registration code. After playing DivX VOD content once, the confirmation screen to deregister will be displayed in [DivX® VOD] in the Setup Menu. If you press the OK button on the confirmation screen, the deregistration code will be generated and you will not be able to play any contents that you purchased using the present registration code.
  You will obtain the new registration code by pressing the OK button on the deregistration code screen.
- If you purchase DivX VOD content using a registration code different from this TV's code, you will not be able to play this content. ([Your device is not authorized to play this DivX protected video.] is displayed.)

Regarding DivX content that can only be played a set number of times

Some DivX VOD content can only be played a set number of times.
When you play this content, the remaining number of plays is displayed. You cannot play this content when the number of remaining plays is zero. ([This DivX rental has expired.] is displayed.)

- When playing this content, the number of remaining plays is reduced by one in the following conditions:
  - If you exit the current application.
  - If you play the other content.
  - If you go to the next or previous content.

Network

On screen messages

Message	Meaning / Action
An internal error occurred.	• Check the settings. ➡ **(p. 71 - 74)**
Cannot read file	• The file is broken or unreadable. Check applicable data format. ➡ **(p. 91 - 92)**
Communication with the server failed.	• This might be a problem of the media server. Read the manual of the server software.
Connection to the server failed.	• Check the connections and settings. ➡ **(p. 70 - 74)**
Server not found	• There is no available media server on your home network. Check the connections and settings. ➡ **(p. 70 - 74)**
The software update is not completed.	• Network download failed. Check the connections and settings. ➡ **(p. 70 - 74)**

USB connection

- It is recommended to connect the USB Flash Memory directly to the TV's USB ports.
- Some USB devices or USB HUB may not be used with this TV.
- You cannot connect any devices by using USB card reader.
- You cannot use two or more same kind of USB devices simultaneously except USB Flash Memory.

Note

- Additional information for USB devices may be on the following web site. (English only)
  http://panasonic.jp/support/global/cs/tv/

USB Keyboard

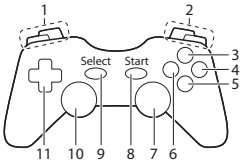
- A USB Keyboard which requires a driver is not supported.
- Characters may not be displayed correctly on the TV screen depending on the connected keyboard or the keyboard layout setting.
- Some of the keys of USB keyboards correspond to the operation of the remote control.

USB Keyboard	Remote Control	USB Keyboard	Remote Control
↑ / ↓ / ← / →	Cursor buttons	F2	VIERA TOOLS
Enter	OK	F3	MENU
Backspace	BACK/RETURN	F4	INPUT (AV)
Esc	EXIT	F5 / F6	Channel Down / Up
0 - 9 / Character	Numeric buttons	F7 / F8	Volume Down / Up
F1	GUIDE	F9 / F10 / F11 / F12	Coloured buttons

Gamepad

- Check the gamepads that have been tested for the performance with this TV at the following website. (English only)
  http://panasonic.jp/support/global/cs/tv/
- Some of the keys of gamepads correspond to the operation of the remote control.

Example :



	Remote Control		Remote Control
1	Volume Up / Down	7	VIERA TOOLS
2	Channel Up / Down	8	EXIT
3	GUIDE	9	INPUT (AV)
4	OK		
5	BACK/RETURN	10	MENU
6	VIERA Connect	11	Cursor buttons

Maintenance

First, remove the mains plug from the socket outlet.

Display panel, Cabinet, Pedestal

For regular care:
Gently wipe the surface of the display panel, cabinet, or pedestal by using a soft cloth to clean the dirt or fingerprints.

For stubborn dirt:
Dampen a soft cloth with clean water or diluted neutral detergent (1 part detergent to 100 parts water). Then wring the cloth and wipe the surface. Finally, wipe away all the moisture.

Caution

- Do not use a hard cloth or rub the surface too hard. This may cause scratches on the surface.
- Take care not to subject the TV's surfaces to water or detergent. Liquid inside the TV could lead to product failure.
- Take care not to subject the surfaces to insect repellent, solvent, thinner, or other volatile substances. This may degrade surface quality or cause peeling of the paint.
- The surface of the display panel is specially treated and may be easily damaged. Take care not to tap or scratch the surface with your fingernail or other hard objects.
- Do not allow the cabinet and pedestal to make contact with a rubber or PVC substance for a long time. This may degrade surface quality.

Mains plug

Wipe the mains plug with a dry cloth at regular intervals. Moisture and dust may lead to fire or electrical shock.

FAQs

Before requesting service or assistance, please follow these simple guides to resolve the problem.
If the problem still persists, please contact your local Panasonic dealer for assistance.

White spots or shadow images (noise)

- Check the position, direction, and connection of the aerial.

Neither image nor sound is produced
- Is the TV in “AV mode”?
- Is the mains lead plugged into the socket outlet?
- Is the TV turned On?
- Check the Picture Menu (p. 33 - 35) and volume.
- Check all required cables and connections are firmly in place.

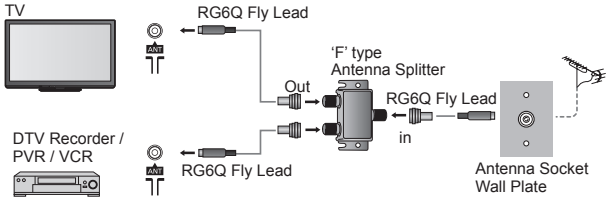
An error message appears
- Follow the message’s instructions.
- If the problem persists, contact your local Panasonic dealer.

“VIERA Link” function does not work and an error message appears
- Confirm the connection. (p. 79)
- Turn the connected equipment on and then switch the TV on. (p. 80)

Contrast is reduced
- Contrast is lowered in the following conditions without any user operation for a few minutes:
  - no signal in Digital TV mode or AV mode
  - selected locked channel
  - selected invalid channel
  - selected radio channel
  - displayed menu
  - Thumbnail or still picture

Pixel Statement
- An image on a LCD or Plasma TV screen is created by many small groups of dots known as pixels (which is similar to the image in a newspaper). It also naturally follows that higher panel resolutions contain more pixels. To create a colour image, each pixel consists of three tiny coloured dots (known as sub-pixels), one each of red, green and blue. Each one of these dots is precisely controlled by the electronics of the TV to produce the picture. Whilst Panasonic maintains the highest standards in manufacturing technology and processes in the construction of these panels, there are a number of allowable pixel/subpixel failures that still allow the panel to be defined as a good panel. It is not possible to guarantee absolutely no pixel loss.

	Problem	Actions
Screen	**Chaotic image, noisy**	• Change the setting of [P-NR] in the Picture Menu (to remove noise). ➡ **(p. 33)** • Check nearby electrical products (car, motorcycle, fluorescent lamp).
	No image can be displayed	• Is [Colour] or [Contrast] in the Picture Menu set to the minimum? ➡ **(p. 33)**
	Blurry or distorted image (no sound or low volume)	• Reset channels ➡ **(p. 43 - 44)**
	Unusual image is displayed	• Turn the TV Off with Mains power On / Off switch, then turn it On again.
	[Shop] appears on screen at switch on	• [Shop] was selected in [Auto Tuning] (p. 13) Reset settings in [Shipping Condition] (p. 50), then select [Home] in [Auto Tuning] ➡ **(p. 13)**
Sound	**No sound is produced**	• Is “Sound Mute” active? ➡ **(p. 12)** • Is the volume set to the minimum?
	Sound level is low or sound is distorted	• Sound signal reception may be deteriorated. • Set [MPX] in the Sound Menu to [Mono] ➡ **(p. 36)**
	Unusual sound from the TV	• When power is on, whirring sound of cooling fan or drive noise may be heard from inside the TV (not a sign of faulty operation).

	Problem	Actions
HDMI	**Sound is unusual**	• Set the sound setting of the connected equipment to “2ch L.PCM”. • Check the [HDMI1 / 2 / 3 / 4 Input] setting in the Sound Menu. ➡ **(p. 37)** • If digital sound connection has a problem, select analogue sound connection. ➡ **(p. 88)**
	Pictures from external equipment are unusual when the equipment is connected via HDMI	• Check the HDMI cable is connected properly. ➡ **(p. 79, 85 - 86)** • Turn the TV and equipment Off, then turn them On again. • Check an input signal from the equipment. ➡ **(p. 89)** • Use equipment compliant with EIA/CEA-861/861D.
Network	**Cannot connect to the network**	• Check the LAN cable or Wireless LAN Adaptor is connected properly. ➡ **(p. 70)** • Check the connections and settings. ➡ **(p. 70 - 74)** • Check the network equipment and network environment. • If the problem persists, consult your Internet Service Provider or telecommunications company.
	Cannot select the file during DLNA operations	• Is the media server prepared? ➡ **(p. 69)** • Check applicable data format. ➡ **(p. 91 - 92)**
	Cannot operate VIERA Connect	• Check the connections and settings. ➡ **(p. 70 - 74)** • The server or connected line might be busy now.
Digital TV	Note: Digital TV reception is only as good as the antenna and the antenna cabling delivering the DTV signals to the television. Reliable digital TV reception requires high quality, robust DTV signals which can only be achieved when using a TV antenna and cabling designed for digital TV reception. • Further reading please visit: http://www.digitalready.gov.au/publications.aspx where you can download ‘The Digital TV Antenna Systems for Homes Handbook’ information pdf file. • For your safety, the antenna and cabling should be inspected / installed by a licensed installer that should comply with Australian Standard AS1417.1 for Domestic installations or AS1367 for MATV installations.	
	Connecting devices such as DTV recorder / PVR / VCR etc that also require an antenna connection to the digital television	• To maintain optimum antenna signal quality, use an ‘F’ type TV signal splitter (as illustrated) when connecting two or more devices to the same antenna socket.  • Hint: Some degradation of the DTV signal may occur if you are connecting the aerial through an external device (e.g. DVD Recorder or Set Top Box). In this case it is better to use a splitter and connect the aerial directly to both devices.
	After digital TV tuning, (or re-tuning) some or all DTV channels are missing	• Check to ensure your area is covered by DTV transmissions. • Check that the aerial and antenna cable are designed for DTV reception. If you live within 5-10 km of DTV transmission towers, a combined VHF / UHF Digital TV aerial should be adequate. Outside this area, separate VHF and UHF aerials provide superior reception performance. • If you live in a unit or apartment, check to ensure the Master Antenna TV (MATV) system is designed for analogue and DTV reception. Please consult your body corporate.
	Picture infrequently pixelates on some or all channels	• Electrical interference caused by local or distant lighting storms, heavy rain, high wind etc. may cause picture to break up and or audio to mute / distort momentarily. • Impulse noise interference from an infrequently used electrical appliance, or a passing vehicle or lawn mower with a “noisy” ignition system. • Older style antenna cabling, loose fitting/corroded wall socket connections / terminals etc.

	Problem	Actions
Digital TV	**Picture regularly pixelates on some channels, or 'No Signal' message**	• Check [Signal Condition] via TV Setup menu. If [Signal Quality] or [Signal Strength] is red/orange or constantly changing, check aerial/ cable/connections. If problem persists, consult your local TV antenna installer. • Too much signal; is [Signal Strength] always at full strength? If yes, try attenuating (reducing) the signal strength. • Check that the aerial and antenna cable are designed for DTV reception. • The received signal may be too weak to allow the TV to reliably lock to the selected channel to generate a viewable picture. If problem persists, consult your local TV aerial installer. • Interference from household appliances (known as impulse noise) such as light switches, fridges etc. may cause picture break up and / or audio distortion. Use high quality quad shielded coaxial cable (RG6Q) fly lead between TV and antenna wall socket to minimise impulse noise pickup. If problem persists, consult your local TV aerial installer. • Antenna installation may be using an aerial amplifier that is faulty or an older style aerial amplifier that was not designed for digital TV. • Older style antenna cabling, loose fitting / corroded wall socket connections / terminals etc.
3D	**Cannot see 3D images**	• Has the 3D Eyewear been switched On? • Ensure that [3D Mode Selection] is set to [3D]. (p. 29) • Some 3D image signals may not be automatically recognized as 3D images. Set [3D Mode Selection (Manual)] to match the picture format. (p. 29) • Check that there are no obstacles between the infrared sensors on the TV and the 3D Eyewear. If the 3D Eyewear stops receiving the infrared signal for about 5 minutes, the 3D Eyewear will be turned off automatically. • Check the available area to use the 3D Eyewear. (p. 28) • Depending on the person, the 3D images may be difficult to see, or cannot be seen, especially in users that have a different level of eyesight between the left and right eyes. Take the necessary steps (wearing glasses etc.) to correct your eyesight before use.
	3D Eyewear is turned off automatically	• Check that there are no obstacles between the infrared sensors on the TV and the 3D Eyewear or that the 3D Eyewear is placed inside the coverage area (p. 28). If the 3D Eyewear stops receiving the infrared signal for about 5 minutes, the 3D Eyewear will be turned off automatically.
	There is something wrong with the 3D images	• Check the setting of [Picture Sequence] or [Edge Smoother]. ➡ **(p. 30)**
	The indicator lamp does not light when pressing the power button on the 3D Eyewear	• The battery may be running low or flat. Charge it.
Other	**The TV goes into Standby mode**	• Auto power standby function is activated. • The TV enters Standby mode about 30 minutes after analogue broadcasting ends.
	The remote control does not work or is intermittent	• Are the batteries installed correctly? ➡ **(p. 6)** • Has the TV been switched On? • Point the remote control directly at the front of the TV (within about 7 m and a 30 degree angle of the front of the TV). • Situate the TV away from sunshine or other sources of bright light not to shine on the TV's remote control signal receiver.
	Parts of the TV become hot	• Even when the temperature of parts of the front, top and rear panels has risen, these temperature rises will not pose any problems in terms of performance or quality.

Specifications

			TH-P42ST30A	TH-P50ST30A
Power	Power rating		AC 220 - 240 V, 50 / 60 Hz 1.6 A	AC 220 - 240 V, 50 / 60 Hz 2.4 A
	Normal (Home) mode		110 W	153 W
	Standby condition		0.3 W	0.3 W
Display panel	Aspect Ratio		16:9	
	Visible screen size		106 cm (diagonal) 921 mm (W) × 518 mm (H)	127 cm (diagonal) 1,105 mm (W) × 622 mm (H)
	Number of pixels		2,073,600 (1,920 (W) × 1,080 (H)) [5,760 × 1,080 dots]	
Sound	Speaker		(140 mm × 35 mm) × 2, 6 Ω	
	Audio Output		20 W (10 W + 10 W)	
	Headphones		M3 (3.5 mm) stereo mini Jack × 1	
PC signals			VGA, SVGA, WVGA, XGA SXGA, WXGA ····· (compressed) Horizontal scanning frequency 31 - 69 kHz Vertical scanning frequency 59 - 86 Hz	
Receiving Systems / Band name			PAL B/G — Reception of Off air broadcasts Digital TV — 7 MHz VHF / UHF (Australia) free-to-air TV broadcast reception PAL 60 Hz — Playback of NTSC tape from some PAL Video recorders (VCR) M.NTSC — Playback from M. NTSC Video recorders (VCR) NTSC — Playback from NTSC Video recorders (VCR)	
Aerial - Rear			Standard Belling & Lee connector	
Operating Conditions			**Temperature** : 0 °C - 35 °C **Humidity** : 20 % - 80 % RH (non-condensing)	
Connection Terminals	AV1 Input	AUDIO L - R	RCA PIN Type × 2	0.5 V[rms]
		VIDEO	RCA PIN Type × 1	1.0 V[p-p] (75 Ω)
		COMPONENT	Y P_B/C_B, P_R/C_R	1.0 V[p-p] (including synchronisation) ±0.35 V[p-p]
	AV2 Input	AUDIO L - R	RCA PIN Type × 2	0.5 V[rms]
		VIDEO	RCA PIN Type × 1	1.0 V[p-p] (75 Ω)
	AV3 Input	AUDIO L - R	RCA PIN Type × 2	0.5 V[rms]
		VIDEO	RCA PIN Type × 1	1.0 V[p-p] (75 Ω)
	Audio Output	AUDIO L - R	RCA PIN Type × 2	0.5 V[rms] (high impedance)
	Others	HDMI1 - 4 Input	TYPE A Connectors	• This TV supports “HDAVI control 5” function.
		PC Input	HIGH-DENSITY D-SUB 15PIN	R / G / B: 0.7 V[p-p] (75 Ω) HD / VD: TTL Level 2.0 - 5.0 V[p-p] (high impedance)
		DIGITAL AUDIO OUT	PCM / Dolby Digital / DTS, Fiber optic	
		Card slot	SD Card slot × 1	
		USB 1/2/3	USB 2.0 TYPE A Connectors	DC 5 V, Max. 500 mA
		ETHERNET	10BASE-T / 100BASE-TX	
Dimensions (W × H × D)			1,020 mm × 675 mm × 320 mm (With Pedestal) 1,020 mm × 640 mm × 69 mm (TV only)	1,204 mm × 779 mm × 335 mm (With Pedestal) 1,204 mm × 744 mm × 69 mm (TV only)
Mass			23.0 kg Net (With Pedestal) 19.5 kg Net (TV only)	30.0 kg Net (With Pedestal) 26.0 kg Net (TV only)

Note

- Design and Specifications are subject to change without notice. Mass and Dimensions shown are approximate.

Panasonic Warranty

1. The product is warranted for 12 months from the date of purchase. Subject to the conditions of this warranty Panasonic or its Authorised Service Centre will perform necessary service on the product without charge for parts or labour, if in the opinion of Panasonic, the product is found to be faulty within the warranty period.
2. This warranty only applies to Panasonic products purchased in Australia and sold by Panasonic Australia or its Authorised Distributors or Dealers and only where the products are used and serviced within Australia or it's territories. Warranty cover only applies to service carried out by a Panasonic Authorised Service Centre and only if valid proof of purchase is presented when warranty service is requested.
3. This warranty only applies if the product has been installed and used in accordance with the manufacturer's recommendations (as noted in the operating instructions) under normal use and reasonable care (in the opinion of Panasonic). The warranty covers normal domestic use only and does not cover damage, malfunction or failure resulting from use of incorrect voltages, incorrect installation, accident, misuse, neglect, build-up of dirt or dust, abuse, maladjustment of customer controls, mains supply problems, thunderstorm activity, infestation by insects or vermin, tampering or repair by unauthorised persons (including unauthorised alterations), introduction of sand, humidity or liquids, commercial use such as hotel, office, restaurant, or other business or rental use of the product, exposure to abnormally corrosive conditions or any foreign object or matter having entered the product.
4. This warranty does not cover the following items unless the fault or defect existed at the time of purchase:
   (a) Cabinet Part(s)
   (b) Video or Audio Tapes
   (c) SD cards or USB devices
   (d) User replaceable Batteries
   (e) DVD, Blu-ray, or Recordable Discs
   (f) Video / Audio Heads from wear and tear in normal use
   (g) Information stored on Hard Disk Drive, USB stick or SD card
   (h) DTV reception issues caused by TV Aerial / Cabling / Wall socket(s)
   etc
5. Some products may be supplied with Ethernet connection hardware. The warranty is limited on such products and will not cover
   (a) Internet and or DLNA connection / setup related problems
   (b) Access fees and or charges incurred for internet connection
   (c) The use of incompatible software or software not specifically stipulated in the product operations manual; and
   (d) Any indirect or consequential costs associated with the incorrect use or misuse of the hardware, its connection to the internet or any other device.
6. To claim warranty service, when required, you should:
   • Telephone Panasonic's Customer Care Centre on 132600 or visit our website referred to below and use the Service Centre Locator for the name/address of the nearest Authorised Service Centre.
   • Send or take the product to a Panasonic Authorised Service Centre together with your proof of purchase receipt as a proof of purchase date. Please note that freight and insurance to and / or from your nearest Authorised Service Centre must be arranged by you.
   • Note that home or pick-up/delivery service is available for the following products in the major metropolitan areas of Australia or the normal operating areas of the nearest Authorised Service Centres:
   - Plasma/LCD televisions / displays (screen size greater than 103 cm)
7. The warranties hereby conferred do not extend to, and exclude, any costs associated with the installation, de-installation or re-installation of a product, including costs related to the mounting, de-mounting or remounting of any screen, (and any other ancillary activities), delivery, handling, freighting, transportation or insurance of the product or any part thereof or replacement of and do not extend to, and exclude, any damage or loss occurring by reason of, during, associated with, or related to such installation, de-installation, re-installation or transit.

Panasonic Authorised Service Centres are located in major metropolitan areas and most regional centres of Australia, however, coverage will vary dependant on product. For advice on exact Authorised Service Centre locations for your product, please telephone our Customer Care Centre on 132600 or visit our website and use the Service Centre Locator.

In addition to your rights under this warranty, Panasonic products come with consumer guarantees that cannot be excluded under the Australian Consumer Law. If there is a major failure with the product, you can reject the product and elect to have a refund or to have the product replaced or if you wish you may elect to keep the goods and be compensated for the drop in value of the goods. You are also entitled to have the product repaired or replaced if the product fails to be of acceptable quality and the failure does not amount to a major failure.

If there is a major failure in regard to the product which cannot be remedied then you must notify us within a reasonable period by contacting the Panasonic Customer Care Centre. If the failure in the product is not a major failure then Panasonic may choose to repair or replace the product and will do so in a reasonable period of time from receiving notice from you.

THIS WARRANTY CARD AND THE PURCHASE DOCKET (OR SIMILAR PROOF OF PURCHASE) SHOULD BE RETAINED BY THE CUSTOMER AT ALL TIMES

If you require assistance regarding warranty conditions or any other enquiries, please visit the **Panasonic Australia** website **www.panasonic.com.au** or contact by phone on **132 600**
If phoning in, please ensure you have your operating instructions available.

Panasonic Australia Pty. Limited
ACN 001 592 187 ABN 83 001 592 187
1 Innovation Road, Macquarie Park NSW 2113

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